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ABSTRACT

This report presents findings of the California State Postsecondary Education Commission's study of the eligibility of California's public high school graduates for freshman admission to the University of California and the California State University in the fall of 1986. The Commission systematically selected transcripts from 15,973 students from 1,180 state high schools responding to a program undertaken to elicit transcripts from every public regular and continuation high school, public adult school, and California Community College offering a high school diploma program. Regular admission evaluators submitted the transcripts to the same admission analysis that they would have undertaken for first-time freshmen applying for fall 1986 admission. The reviews covered course work completed, scholastic achievement, and entrance examination scores; the latter included scores on the Scholastic Aptitude Test and the American College Test. Characteristics of eligible and ineligible graduates and the context of eligibility are discussed. Results indicate that 14.1% of these graduates were eligible at the University of California and that 27.5% were eligible at the State University. The respective proportions represent 1.6% more and 5.8% less than the master guidelines of the institutions. (TJH)

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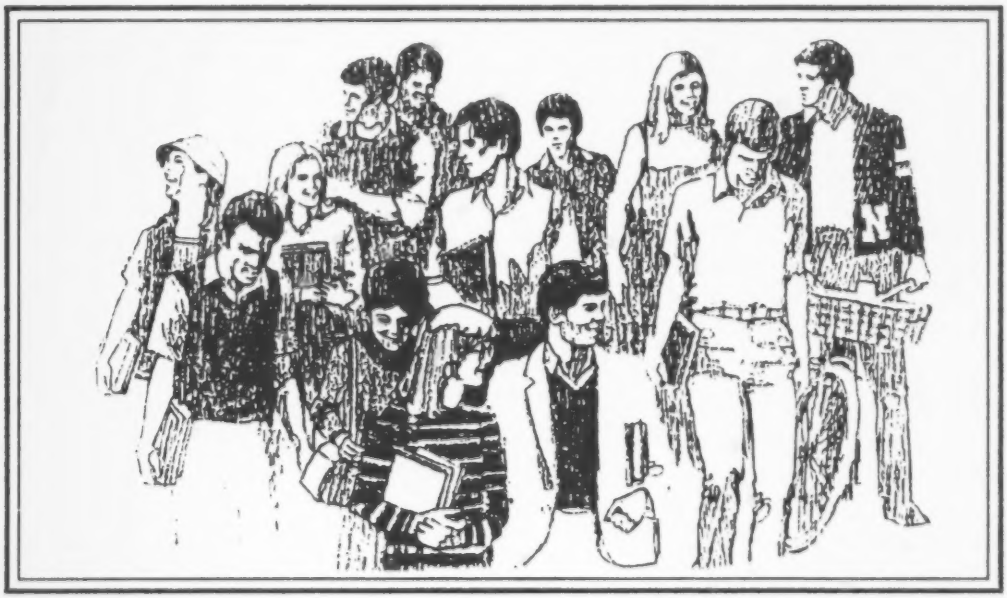
ELIGIBILITY OF CALIFORNIA'S 1986 HIGH SCHOOL GRADUATES FOR ADMISSION TO ITS PUBLIC UNIVERSITIES



CALIFORNIA POSTSECONDARY EDUCATION COMMISSION

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Summary

This report presents the findings of the Commission's study of the eligibility of California's public high school graduates for freshman admission to the University of California and the California State University in Fall 1986. It indicates that 14.1 percent of these graduates were eligible at the University of California -- 1.6 percentage points more than the University's Master Plan guideline of 12.5 percent -- and that 27.5 percent were eligible at the State University -- 5.8 percentage points less than its Master Plan guideline of 33.3 percent.

Following an Executive Summary on pages 1-2 that summarizes these and other major conclusions from the study, Part One on pages 3-6 describes the impetus for the study and Part Two on pages 7-12 explains its scope and methodology. Part Three on pages 13-24 presents statewide estimates of eligibility plus separate estimates by sex, ethnicity, and geographic region of the State. Part Four on pages 25-32 then examines in more detail the academic characteristics of graduates who were eligible and who were ineligible for each segment overall, by sex, and by ethnic group. Part Five on pages 33-38 describes the context within which eligibility is determined by presenting major demographic trends, secondary school attrition rates, differences in students' post-secondary education choices, and the implication of the study's results for changes in admission policies. Finally, the Appendix on pages 39-46 presents additional information on the study design and methods, its historical context,and acknowledgment of its cooperative nature.

The Commission adopted this report at its meeting on March 21, 1988, on recommendation of its Policy Development Committee. Additional copies of the report may be obtained from the Library of the Commission at (916) 322-8031. Questions about the substance of the report may be directed to Jeanne Suhr Ludwig of the Commission staff at (916) 324-4991.

ELIGIBILITY OF CALIFORNIA'S 1986 HIGH SCHOOL GRADUATES FOR ADMISSION TO ITS PUBLIC UNIVERSITIES

California Postsecondary Education Commission Report 88-10

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88-22 Executive Summary (March 1988)

88-23 Report (March 1988)

ELIGIBILITY
OF CALIFORNIA'S 1986 HIGH SCHOOL GRADUATES FOR ADMISSION TO ITS PUBLIC UNIVERSITIES

A Report of the 1986 High School Eligibility Study

CALIFORNIA POSTSECONDARY EDUCATION COMMISSION
Third Floor • 1020 Twelfth Street • Sacramento, California 95814-3985

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Executive Summary

THIS report fulfills the Commission's responsibilities under the 1986-87 Budget Act directing it "to determine the theoretical eligibility rate for the 1985-86 California public high school graduates and other diploma recipients to enroll at the University of California and the California State University in fall 1986." It provides overall estimates of high school graduates' eligibility for the University and State University in comparison to each segment's Master Plan guideline. The report also presents eligibility estimates for men and women and for several ethnic groups.

To determine these rates, the Commission gathered a 6.9 percent random sample of 1986 public high school graduates transcripts and, through the work of the University's and State University's admission staffs, determined the eligibility statuses of each graduate in the sample. Using standard statistical procedures, this data provided the basis for generating reliable estimates for all graduates, for men and women, and for white, Hispanic, Black and Asian graduates. Because these estimates are based on a sample, they are not as precisely accurate as would be eligibility rates determined by examining all graduates' transcripts. Thus, when discussing these estimates, recognition of the probable range of each estimate is important.

The Commission's 1986 High School Eligibility Study generated the following nine findings that have important implications for California education:

- Of California's 1986 public high school graduates, 14.1 percent were eligible for freshman admission to the University of California under its regular admission criteria for Fall 1986. This rate is significantly larger than the Master Plan guideline for the University of 12.5 percent.
- Under the regular admission requirements in effect in Fall 1986 at the California State University, 27.5 percent of California's public high school graduates were eligible for freshman admission. This rate is significantly below the Master Plan guideline for the State University of 33.3 percent.
- A significantly larger proportion of women than men graduating from the State's public high schools are eligible for freshman admission at both the University and the State University. The differences between the rates for men and women are almost exclusively a reflection of the higher grade-point averages earned by women overall and in a completed "a-f" sequence of courses.
- Despite their higher eligibility rates, women are much less likely than men to enroll at the University and State University when eligible to do so.
- Asian high school graduates maintained the highest rates of eligibility for both the University and the State University. Asian graduates are twice as likely as the average graduate to achieve eligibility for either segment and are also somewhat more likely than average to enroll when eligible.
- White graduates continue to demonstrate eligibility for the University and State University at about the average rates. Furthermore, white graduates continue to be less likely than average to enroll at either segment when eligible to do so.
- Hispanic and Black graduates continue to have significantly lower eligibility rates than other graduates. Black and Hispanic graduates eligible to enroll at the University are more likely than average to enroll at the University while those eligible for the State University are less likely than average to enroll there.
- The relations between the eligibility rates of men and women within ethnic groups are the same for University and State University eligible graduates except among Hispanics. White, Black, and Asian women graduates are more likely than men graduates to be eligible for either segment. While Hispanic women graduates are more likely than Hispanic men to be eligible for the California State University, Hispanic men are more likely

than Hispanic women to achieve eligibility for the University of California.

- A significantly larger than average proportion of graduates in the San Francisco Bay Area and in Orange County achieve eligibility for admission to both the University and State University while a significantly smaller than average proportion of graduates in the Fresno/Kern region and the Riverside/San Bernardino region are eligible.

The findings and supporting data base of this study provide a useful and important analytic base for discussion and evaluation of numerous educational policy issues. Prominent among these is the review of the impact of current freshman admission standards in light of the Master Plan guidelines and evaluation of alternative admission standards that would identify pools of eligible high school graduates more closely aligned with those guidelines. Closely related to this area is the assessment of changes in specific standards on educational opportunities in light of the changing characteristics of California's public school graduates. Up-to-date information on eligibility and enrollment behavior can also assist the segments in their enrollment planning and serves as an important factor in long-range educational planning. Finally, longitudinal information about differential eligibility among ethnic groups and geographic regions can provide one type of program objective when planning and reviewing efforts to achieve more equitable opportunities for admission to the State's public universities. The importance of this study extends beyond the mere estimates generated because these results contribute valuable information to many of the most pressing educational concerns facing the State today.

1 *Impetus for the Study*

THE *1960 Master Plan for Higher Education in California* urged the California State University to select its first-time freshmen from the top one-third of all graduates of California public high schools and the University of California to select its first-time freshmen from the top one-eighth of those graduates. Periodically, the State seeks an assessment of the congruence between these guidelines and the proportions of public high school graduates who meet the criteria for freshman admission established by the University and State University. So far, five such studies have been conducted -- in 1955, 1961, 1966, 1976, and 1983. The 1986-87 Governor's Budget directed the Commission to conduct a sixth study "to determine the theoretical eligibility rate for the 1985-86 California public high school graduates and other diploma recipients to enroll at the University of California and the California State University in fall 1986." The Commission staff has undertaken that study in cooperation with California's public high schools, the State Department of Education, the University, and the State University.

In response to the directive, this report presents the results of a study of the eligibility of 1986 public high school graduates for the University and State University in five chapters and an appendix:

- Part One describes the impetus for the current study.
- Part Two describes its scope and procedure, including the sampling design, the procedures used to compute eligibility estimates, and important considerations related to sample research necessary to understanding the estimates generated.
- Part Three reports the overall statewide eligibility rates for admission of California's 1985-86 high school graduates as first-time freshmen to the University and the State University in fall 1986. It presents the differences in eligibility as a function of student gender and, where the data permit, by student ethnicity. The chapter puts these findings in perspective by comparing them, as appropriate, to findings of the five earlier eligibility studies conducted since 1955 and with the Master Plan recommendations. It also presents differences in eligibility rates by geographic region. Finally, it relates the study's results to actual college-going behavior of the class of 1986.
- Part Four examines the characteristics of graduates' eligibility for the University and the State University in order to understand the nature of students' preparation for postsecondary education and the barriers faced by individuals and institutions as they grapple with the transition from secondary to postsecondary education. Differences in these characteristics between men and women and among members of different ethnic subgroups are investigated as well as changes in these rates over time.
- Part Five describes the context within which eligibility is determined. It presents demographic trends in the school age population, secondary school attrition rates, differences in student choice of postsecondary institutions, and the implications of the study's results for changes in admission requirements and policies.
- The appendix includes additional information on the design and methods of the study, its historical context, and acknowledgements of the invaluable assistance in this study of the staffs of California's public high schools, the State Department of Education, the California State University, and the University of California.

Master Plan guidelines

Through its *1960 Master Plan for Higher Education in California*, the State of California established a tripartite system of public higher education, consisting of the University of California, the California State University, and the California Community Colleges. These three segments have different missions and functions, including different student pop

ulations to serve. Under the Master Plan, the University of California is to establish its freshman admission criteria such that it selects its first-time freshmen from the top one-eighth of the public high school graduating class. Similarly, the State University is to establish its freshman admission requirements such that it selects its first-time freshmen from the top one-third of that graduating class. All students interested and able to benefit have access to public higher education through the Community Colleges.

While the 1960 Master Plan included these guidelines about the pool of high school graduates each segment is to serve, it vested the governing board of each segment with the authority to establish and modify its admission standards. Under the Master Plan, each segment is to formulate its own admission criteria in a manner that will ensure the highest possibility for scholastic success of students accepted for admission. In developing their admission standards, the University and State University institute those scholarship, subject-matter, and entrance-test criteria they believe will most likely achieve this goal for their eligibility pool. The Commission, as specified in *Education Code* Section 66903(18), has responsibility for reviewing proposals for changes affecting the eligibility pool.

While these guidelines are not in statute, the segments of public higher education have established them as fundamental segmental policy. The two four-year segments have treated eligibility as entitlement, that is, any high school graduate applying for admission who fulfills the eligibility requirements of the segment is guaranteed a slot in the freshman class on some campus within the segment.

Periodically, the Master Plan has undergone substantive review. As in the 1973 review, the recent Commission for the Review of the Master Plan for Higher Education affirmed the original 1960 guidelines on the size of the segmental eligibility pools in its final report, *The Master Plan Renewed: Unity, Equity, Quality, and Efficiency in California Postsecondary Education* (1987, p. 15).

School reform influences

The State of California, as well as the nation at large, has been in the grips of a major school reform movement for at least the last five years. The publication of *A Nation at Risk* in 1983 brought to public attention concerns about school effectiveness and student achievement. In 1983, the Legislature and Governor, working with the Superintendent of Public Instruction, approved California's first major school reform act in more than a decade. That comprehensive act -- SB 813 -- sought to (1) increase rigor by establishing minimum graduation requirements, model curriculum standards, and lengthening of the school day and year, (2) clarify objectives by increased testing and school performance reporting, and (3) expand resources available by increasing beginning teachers' salaries and funding a tenth grade counseling effort. The California State Board of Education also announced model graduation standards that are more extensive than those required by Senate Bill 813. For the next three years, major budget augmentations supported continued school improvement efforts.

During those years, both of California's public universities expanded their freshman admission standards by adding new course requirements. The University of California added a third year of college preparatory mathematics, increased the number of approved electives from one or two to four, and required that students complete at least seven of the mandatory 15 courses in the final two years of high school. In 1984, the California State University added specific course requirements for the first time since 1966 -- four years of English and two years of mathematics. In Fall 1985, the State University's Trustees approved the expansion of these course requirements such that by Fall 1992 a full complement of 15 courses will be required. The expectation that the academic achievement of all students will be enhanced by the establishment of higher standards was the impetus behind all of these efforts. This study, focusing on the Class of 1986 who were already enrolled in their tenth grade courses when the reform effort began, is unlikely to provide a meaningful evaluation of the full impact of these changes.

While the improvement of high school students' preparation for higher education is strongly supported by all constituents concerned about education, several constituents raised concerns about the ability of all California high schools to provide an adequate number of these courses and to staff them with qualified teachers. Studies of students' course-taking patterns, such as *High Schools and College*

Preparation: The Critical Linkage by PACE -- the Policy Analysis for California Education (1987) -- are finding that California schools are offering more core academic subjects such as English, mathematics, science, and foreign language. Ninety-five percent of all public schools indicate that they can provide the required college preparatory courses, but substantial disparity exists in their academic course offerings and even greater disparity persists in the percentage of students completing a full college preparatory program. Enrollments in core academic courses have increased while enrollments in vocational arts and electives have declined. The largest proportional increases in academic subjects occurred in large minority high schools that previously had particularly low rates of enrollment in these areas.

Recognizing the need for additional time for students and schools to adjust to its new standards, the State University established conditional admission whereby students currently achieve regular, although conditional, admission by completing at least five of the required six courses. As of Fall 1988, students will be regularly admitted if they have completed at least ten of the 15 required courses on the condition that they make up all subject deficiencies within the first two years of their enrollment.

Eligibility evaluation

The current study assesses the impact of changes in the admission requirements of California's public university on the eligibility status of California's public high school graduates in light of their changing characteristics. It replicates as closely as possible the most recent of the five previous studies -- that of 1983 graduates. The only major departure from the 1983 study design was the elimination of private high schools from the study. Information available from private high schools in 1983 was insufficient to generate reliable estimates of these students' eligibility to enroll at the University and State University. The elimination of the private high schools in 1986 provided the opportunity to draw larger samples from the public high schools.

This final report of the study's findings provides information useful for evaluating how the changes in admission criteria affect the eligibility status of California's public high school graduates since 1983. The segments can thus use the results of this study, as necessary, to recalibrate their respective admission standards so that the proportions of high school graduates eligible for admission match more closely the recommended guidelines in the Master Plan.

2 *Methods and Scope of the Study*

Methods of the study

To fulfill its responsibilities for the 1986 Eligibility Study, the Commission had to compute the estimated percentage of California's 1985-86 public high school diploma recipients eligible for admission as first-time freshmen in Fall 1986 at the University of California and the California State University.

Schools surveyed

In order to gather the information necessary to fulfill its charge, the Commission contacted every California public regular and continuation high school, public adult school, and California Community College offering a public high school diploma program. To be included in the study, these institutions must have been registered with the California State Department of Education in 1985-86 and had at least one graduate in that year. The Department provided the Commission with data on the size and composition of the 1985-86 twelfth grade class as a basis for establishing sampling rates for each high school. In October 1986, the Commission and the Department sent school superintendents and principals a letter announcing the study, and in November, the schools received a letter providing instructions on how to select a random sample of graduates' transcripts from their schools. A sample of the instruction letter is included in the appendix to this report.

Contacts with the schools yielded usable responses from 87.9 percent of the high schools that included 94.4 percent of the 1985-86 graduating class. Display 1 below presents the final school participation rates for this study. These rates are comparable to those achieved for the 1983 study in which 90 percent of the public schools that included 96 percent of that year's public high school graduates responded.

Analysis of transcripts

The 1,180 responding schools submitted to the Commission 15,973 student transcripts systematically selected to assure an unbiased sample. Commission staff reviewed each school's set of transcripts in light of its sampling instructions to verify compliance with the random sampling procedures. After removing all personally identifying information from the transcripts, the Commission staff sent copies of the transcripts to the University and State University for evaluation. Regular admission evaluators at each segment submitted these transcripts to the same admission analysis that they would have undertaken for first-time freshmen applying for Fall 1986, including a review of the course work completed, scholastic achievement, and entrance examination scores. Based on these analyses, the segments classified each transcript in the sample as "eligible" or "ineligible" based on the regular admission criteria for first-time freshmen in Fall 1986 at each

DISPLAY 1 Institutions Participating in the 1986 High School Eligibility Study by Type of Institution

Type of Institution	Total Number	Number Responding	Percent Responding	Transcripts Requested	Transcripts Received	Percent
Regular and Continuation	1,169	1,041	89.0%	15,697	15,432	98.3%
Adult and Community College Programs	173	139	80.3	661	541	81.8
Total Public	1,342	1,180	87.9	16,358	15,973	97.6

Source: California Postsecondary Education Commission.

segment. Display 2 below presents these criteria for the University and State University.

As Display 2 illustrates, high school graduates may achieve eligibility for admission to the University of California and the California State University through a variety of means, including grade-point average alone, college entrance examination scores alone, or selected combinations of grades and test scores. For the purposes of this study, the Commission and the segments employed a policy of "demonstrable eligibility" in arriving at eligibility determinations. Under this policy, only those graduates whose high school transcripts indicated that they had satisfied all applicable segmental subject-area, scholastic, and examination requirements were deemed eligible for admission. If a transcript did not contain all of the information needed to demonstrate a graduate's eligibility -- such as that the graduate had passed all of the required courses or had taken all of the required tests -- the graduate was judged to be *ineligible*, except in the following two types of cases, where test scores were missing:

1. *Entrance test scores waived for some graduates:* The University of California requires *all* freshman applicants to take a national college entrance examination -- the Scholastic Aptitude Test (SAT) or the American College Test (ACT) -- and three

DISPLAY 2 *1986 Admission Requirements for First-Time Freshmen of the University of California and the California State University*

Admission Requirements	University of California	The California State University
Subject Area Requirements		
a. History	One year	None
b. English	Four years	Four years *
c. Mathematics	Three years	Two years *
d. Laboratory Science	One year	None
e. Foreign Language	Two years	None
f. Advanced Courses and Electives	Four years	None
Scholarship Requirement	2.78 cumulative grade-point-average (GPA in "a-f" courses)	2.0 cumulative grade-point average (GPA)
Examination Requirement	SAT/ACT and three College Board Achievement Tests	SAT/ACT required if grade-point average is not greater than 3.1.
Scholarship Examination	GPA between 2.78 and 3.29, with qualifying test scores on the University's Eligibility Index	GPA between 2.00 and 3.1, with qualifying test scores on the State University's Eligibility Index
Entrance by Examination	Scholastic Aptitude Test total of 1,100 and total Achievement Test of 1,650, with minimum individual scores of 500 on each	No provision

* At least five of the six courses required in English and mathematics must be completed to qualify for regular admission on condition.

Sources: University of California, 1985, 1986-87, pp. 12-15, and the California State University, 1985, pp. 2-3.

College Entrance Examination Board (CEEB) Achievement Tests. However, it admits applicants with grade-point averages of 3.3 or greater in their "a-f" courses notwithstanding the outcomes of the examinations. The University and the Commission deemed eligible those graduates in the sample who had grade-point averages of 3.3 or greater but were missing some or all of their test scores, if they met all other admission requirements. Similarly deemed eligible were graduates with grade-point averages between 2.78 and 3.29 in their "a-f" courses whose test scores qualified them for admission but who were missing one or more of their CEEB Achievement Tests, as long as they met all other admission requirements.

2. *SAT scores missing from some transcripts subsequently located:* Among the transcripts provided to the Commission by the high schools, 36 percent contained SAT scores. The College Board reports a somewhat higher test-taking rate for California high school seniors. This difference stems from several causes: (1) some students take the test following graduation; (2) others fail to provide their high schools with their scores; and (3) some high schools do not maintain SAT result files for their graduates. As in the study of 1983 graduates, to ensure more accurate estimates of eligibility, the Commission staff contacted the College Board for help in completing the records of students in the sample by identifying those for whom SAT scores exist. With the assistance of the Educational Testing Service and using procedures that protected the confidentiality of individual student information, the Commission staff was able to locate all available appropriate test data for use in eligibility determinations.

Subgroup calculations

Eligibility estimates were computed for the same student subgroups for which estimates were generated in the 1983 study -- overall statewide rates and separate rates for men and women and for white, Hispanic, Black, and Asian graduates. In addition, the expanded public school sample size allowed estimates to be generated for Filipino graduates and separate estimates for men and women within the four major ethnic subgroups. Display 3 below shows the categories of students for which eligibility estimates were computed. As noted earlier, the design of the 1986 study excluded private schools and therefore no estimates are available for graduates of those schools.

Because of the interest in estimating eligibility for student subgroups, particularly graduates from ethnic populations that tend to be underrepresented in California postsecondary education and, if possible, to examine differences between men and women within these subgroups, the sampling design varied by school. The proportion of transcripts selected from schools with large enrollments of Black and Hispanic students was larger than that selected from the remaining schools except if the school was very small -- fewer than 50 graduates. This procedure ensured adequate size samples of transcripts for graduates from the major ethnic groups for the computation of reliable eligibility estimates for each

DISPLAY 3 Subgroups for Which 1986 Eligibility Estimates Were Developed

School Type	Segmental Total	White	Hispanic	Black	Asian	Filipino	American Indian
Public	Yes	Yes	Yes	Yes	Yes	Yes	No
Men	Yes	Yes	Yes	Yes	Yes	No	No
Women	Yes	Yes	Yes	Yes	Yes	No	No
Private	No	No	No	No	No	No	No

Source: California Postsecondary Education Commission.

subgroup. In calculating these estimates, the Commission used other standard statistical techniques to ensure that the information for each graduate and each high school accurately reflected its actual weight in the entire population. Display 23 in the appendix compares the size and composition of the study's sample with the total public high school graduating class of 1986.

Observations and caveats about interpreting the estimates

1. The 1986 eligibility estimates are based on information obtained for a 6.9 percent sample of California's high school graduates' transcripts. To compute an actual or true eligibility rate, the eligibility status of every graduate would need to be included in the computation. While this procedure is not realistic, fortunately the use of standard sampling procedures provides a means for developing reliable estimates of eligibility rates based on information from a sample of these graduates' transcripts. However, because the estimates are based on a sample, they are not precisely accurate. Standard statistical procedures also include a means of computing the level of precision of these estimates. The *precision level* provides an upper and lower boundary within which the probable eligibility rate occurs. For example, the range for an eligibility estimate of 12.5 percent with a precision level of ±0.7 of a percentage point is 11.8 percent to 13.2 percent, while the range for an eligibility estimate of 30 percent with a precision level of ±1.5 percentage points is 28.5 percent to 31.5 percent.

2. The magnitude of a precision level depends on the sample size and on the level of confidence determined as appropriate. All eligibility estimates appearing in this report have a confidence level of 95 percent. However, each eligibility estimate has a different precision level depending on the size of the sample used. A variety of formulas exist for computing sample precision depending on the assumptions about the nature of the sample. For this study, the Commission applied the standard formula for a stratified random sample.

3. The Commission applied various statistical adjustment procedures to the sample obtained from the high schools prior to computing the eligibility estimates. These procedures conform with accepted statistical standards and were undertaken in order to (a) verify the integrity of the graduate sample, and (b) adjust for differences in sampling rates for those schools that did participate. Nonetheless, while eligibility figures presented in this report represent very reliable statewide estimates developed on the basis of standard statistical methods, because they are based on the responses from 1,180 high schools of California's 1,342 high schools that graduated at least one student in 1986, they probably differ slightly from those that would have been obtained if the 162 nonresponding high schools had participated.

4. The 6.9 percent sample of the statewide high school graduating class yields findings with sufficient accuracy and reliability for use in State-level and segmental planning, but these same findings may not be relevant for regional, district, or local campus planning, particularly where such planning involved small subsets of the statewide student population. As such, the applicability of the findings presented in this report should be considered carefully prior to employing them in institutional policy analysis and development, and these guidelines and caveats should enter in this consideration.

5. Reliable eligibility estimates for public high school graduates have been computed overall, for men and women, and for white, Hispanic, Black, and Asian graduates. As noted earlier, insufficient numbers of Filipino and American Indian graduates appeared in the sample disallowing the computation of reliable estimates for these student subgroups although the estimate for Filipino graduates is reported. However, students from all subgroups are included in the calculation of the overall and gender estimates.

6. Because of smaller sample sizes for subgroup estimates, the eligibility estimates for these subgroups involve somewhat larger precision levels than for the overall statewide estimate. Any subgroup estimate that had a precision level greater

than 3 percentage points was considered unreliable.

7. While the design of the 1986 study purposefully replicated the 1983 study design to facilitate comparisons across time of the effects of changing admission standards on student eligibility, the samples for each study are unique, and the differing characteristics of the samples and the student populations must be considered carefully when discussing these effects.

3 *Eligibility of 1986 Graduates of California's Public High Schools*

THE 1960 Master Plan for Higher Education recommended that the University of California establish freshman admission criteria such that it select its first-time freshmen from the top one-eighth of all graduates of California's *public* high schools. Similarly, the California State University was urged to select its first-time freshmen from the top one-third of the *public* high school graduating class. This eligibility study thus focuses exclusively on the public high school graduating class of 1986 and analyzes the eligibility of these graduates in light of the segmental admission requirements in effect for Fall 1986.

This chapter presents the overall statewide eligibility rates for admission of these graduates to the University and State University. It also reports differences in eligibility as a function of student gender and, where the data permit, by student ethnicity. The chapter presents a comparison of these findings with those of earlier eligibility studies, in particular the 1983 study and also differences in eligibility by region. Finally, it relates the study's results on eligibility to the actual college-going behavior of the class of 1986.

Estimated eligibility for the University of California

A student can achieve eligibility for the University of California by several different means:

- By earning a grade-point average of 3.3 or better in the required "a-f" courses;
- By earning a grade-point average between 2.78 and 3.3 in the required "a-f" courses and having a college admission test score that qualifies on the University's Eligibility Index; or
- By having a total SAT Verbal and Mathematics score of 1100 or better, or a composite score of 26 or higher on the ACT, plus a combined score of at least 1,650 on three College Board Achievement tests with a minimum score of 500 for each.

Display 4 on page 14 presents the overall statewide eligibility rate of 1986 public high school graduates for the University, the rates for men and women graduates, and for five ethnic groups -- white, Hispanic, Black, Asian, and Filipino graduates -- in comparison with the statewide guideline established in the 1960 Master Plan.

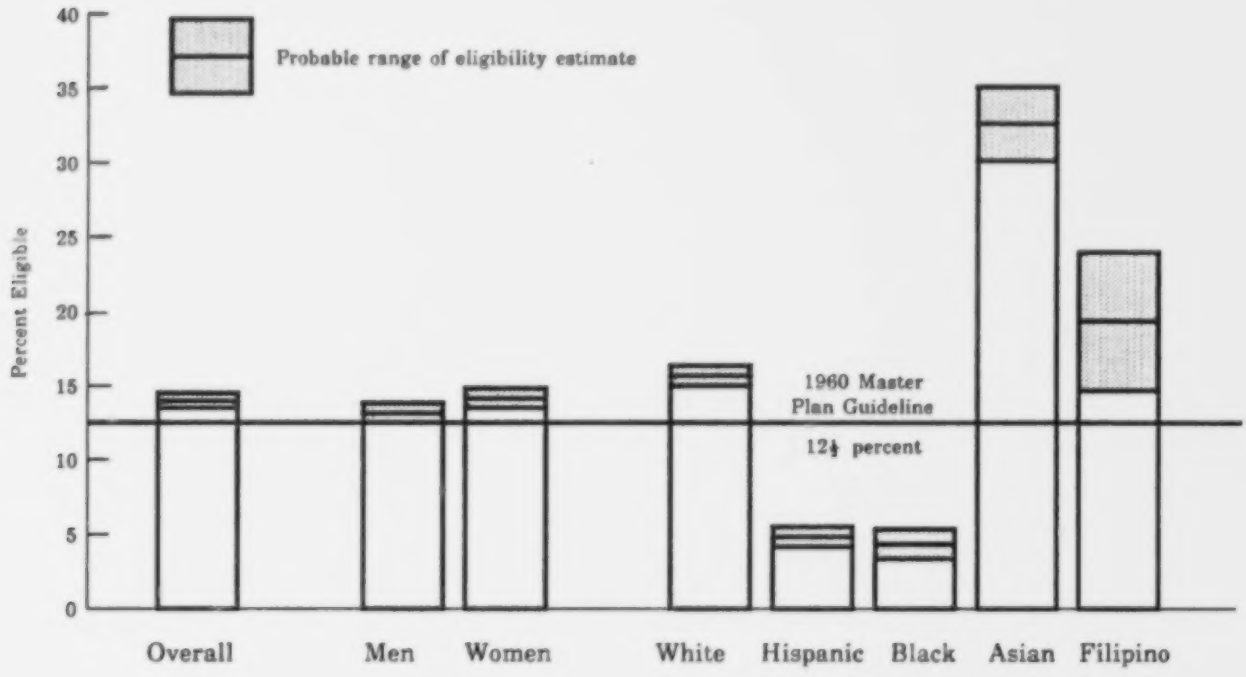
Eligibility of all graduates

Overall, an estimated 14.1 percent of the 1986 public high school graduating class qualified for admission to the University of California in Fall 1986 under its regular admission criteria. Based on a sample size of 15,572 usable student records, or 6.9 percent of the total public school graduating class, the precision level of this estimate is ±0.54 percent, yielding a probable range for the estimate of 13.56 to 14.64 percent. This estimated eligibility rate is significantly larger than the estimated rate for 1983 graduates which was 13.2 percent.

Eligibility of men and women

The estimated eligibility rate for young men graduating from California's public high schools is 13.3 percent based on a sample of 7,572 student records, or 6.9 percent of all records of male graduates. The precision level for this estimate is ±0.78 percent, yielding the probable range for the estimate of 12.52 to 14.08 percent. Similarly, the estimated eligibility rate for young women graduating from these high schools is 15.1 percent based on a sample of 7,998 student records, or 7.0 percent of all such records for female graduates. The precision level for the female estimate is ±0.80 yielding a probable range for the estimate of 14.30 to 15.90 percent. A statistically significant difference exists in the eligibility rates of male and female graduates of the State's public schools.

DISPLAY 4 Estimated Eligibility Rates for Freshman Admission to the University of California of 1986 Graduates of California's Public High Schools, by Sex and Major Ethnic Group



	Overall*	Men	Women	White	Hispanic	Black	Asian	Filipino
Eligibility Pool	14.1%	13.3%	15.1%	15.8%	5.0%	4.5%	32.8%	19.4%
Precision Level	±0.54%	±0.78%	±0.80%	±0.74%	±0.72%	±1.12%	±2.58%	±4.71%
Sample Size	15,572	7,572	7,998	9,119	3,334	1,437	1,149	322

* Includes American Indian and Pacific Island graduates, but the small sample sizes for these ethnic groups preclude computation of their eligibility rates.

Source: California Postsecondary Education Commission.

In contrast to the change in the overall estimate, the changes in the estimated eligibility rates since 1983 for men is not statistically significant while the change for women is statistically significant. The significant differences between the eligibility of men and women noted above was also evident in 1983.

Eligibility of ethnic groups

The eligibility study of the 1983 graduating class was the first to provide estimated eligibility rates for different subgroups of students. In addition to separate rates for men and women as reported above, separate estimates were available for white, Hispanic, Black, and Asian graduates. The current study replicates these findings and provides an estimate for Filipino graduates. The larger sample also enables computation of separate estimates for men and women within some ethnic subgroups as shown in Display 5.

DISPLAY 5 *Estimated Eligibility Rates for Freshman Admission to the University of California of 1986 Graduates of California's Public High Schools, by Sex Within Major Ethnic Group*

	White		Hispanic		Black		Asian	
	Men	Women	Men	Women	Men	Women	Men	Women
Eligibility Pool	14.9%	17.0%	5.5%	4.7%	3.3%	5.7%	30.2%	36.0%
Precision Level	±1.08	±1.10	±1.03	±0.94	±1.54	±1.72	±3.17	±3.60
Sample Size	4,495	4,621	1,541	1,793	665	771	604	545

Source: California Postsecondary Education Commission.

The relationship among the eligibility rates of these groups has remained relatively unchanged. Asian graduates are twice as likely to achieve eligibility for admission to the University of California as white graduates while white graduates are three times more likely than Hispanic and Black graduates to achieve University eligibility. Among 1986 high school graduates, 15.8 percent of the white graduates were eligible for freshman admission to the University of California while the estimated rate among Hispanic graduates was 5.0 percent, among Black graduates was 4.5 percent, among Asian graduates was 32.8 percent, and among Filipino graduates was 19.4 percent. The size of each subgroup sample differs and thus precision levels also differ. Given the precision level of each estimate, the probable ranges of estimated eligibility rates are 15.06 to 16.54 percent of white graduates, 4.28 to 5.72 percent of Hispanic graduates, 3.38 to 5.62 percent of Black graduates, 30.22 to 35.38 percent of Asian graduates, and 14.69 to 24.11 percent of Filipino graduates.

While the relative differences among eligibility rates of graduates of different ethnic backgrounds noted in the 1983 study persist in 1986, changes in eligibility rates have occurred for some subgroups. The eligibility rate of Asian graduates increased by 6.6 percentage points since 1983 -- a statistically and substantially significant change. The eligibility rate of Black graduates increased 0.9 of a percentage point -- a 25 percent increase that is not statistically significant. Relatively no change occurred in the eligibility rates of white and Hispanic graduates for admission to the University between 1983 and 1986.

Eligibility of men and women within different ethnic groups

To a large extent the difference between the estimated eligibility rates for men and women overall are also reflected in the differences between their rates within ethnic subgroups, as illustrated in Display 5. Among white, Black, and Asian graduates, a larger proportion of women graduates achieve eligibility for the University than do men. Among Hispanic graduates, the relative eligibility of men and women for the University is opposite the general trend. The proportion of eligible Hispanic men is somewhat larger than that for Hispanic women, although the difference is not statistically significant.

Estimated eligibility for the California State University

As was the case for the University, students can establish eligibility for the State University by more than one means:

- By earning an overall grade-point average greater than 3.1 in their 10th, 11th, and 12th grade courses excluding physical education and military science and by completing five of the six required courses in English and mathematics, or
- By earning an overall grade-point average between 2.0 and 3.1 with the five required courses and having college admission test scores that qualify on the State University's Eligibility Index.

Display 6 on the opposite page shows the overall statewide eligibility rate of 1986 public high school graduates for the State University, the rates for men and women graduates, and for five ethnic groups -- white, Hispanic, Black, Asian, and Filipino graduates -- in comparison with the statewide guideline established in the 1960 Master Plan.

Eligibility of all graduates

The overall eligibility rate of 1986 public high school graduates for freshman admission to the California State University is 27.5 percent. Based on a sample size of 15,576 usable student records, or 6.9 percent of the graduating class, the precision level of this estimate is ±0.69 percent yielding a probable range for the estimate of 26.81 to 28.19. While this rate is less than the rate for the class of 1983 of 29.6, it is important to recall several recent changes in the admission requirements of the State University. Based on the findings of the 1983 study, the State University immediately implemented administrative adjustments to its Eligibility Index that expanded the eligibility pool to include the top one-third of the 1983 graduates. To be eligible in 1986, graduates qualified under this adjusted index had completed at least five of the six required college preparatory courses in English and mathematics. An additional 4.3 percent of the 1986 graduates qualified under the index but were ineligible because they lacked more than one of the six required courses. The changes in admission requirements have had a significant statistical and substantive impact on the eligibility of public high school graduates.

Eligibility of men and women

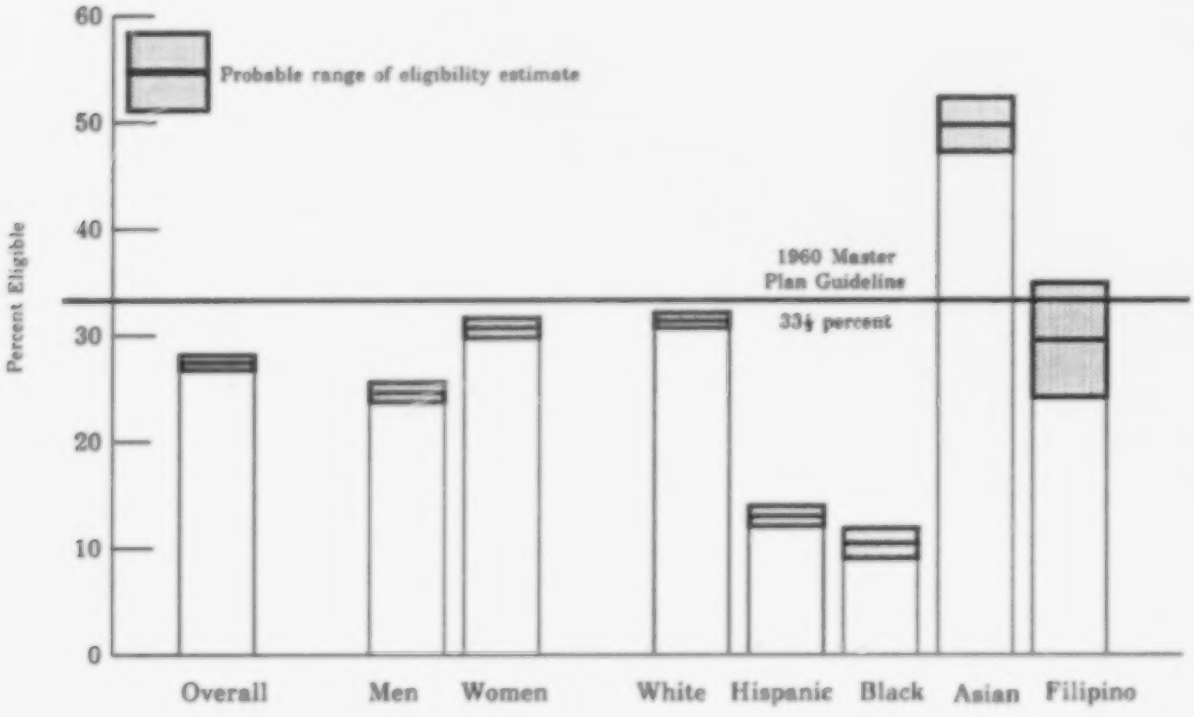
Consistent with the findings for the University, male and female graduates of the State's public high schools achieve eligibility for the State University at significantly different rates. The estimated eligibility rate for young men is 24.8 percent based on a sample of 7,574 student records, or 6.9 percent of the male graduating class. The precision level for this estimate is ±1.00 percent, yielding a probable range for the estimate of 23.80 to 25.80 percent. For young women, their estimated eligibility rate is 30.8 based on a sample of 8,000 student records, or 7.0 percent of the female graduating class. The precision of this estimate is ±1.02 percent yielding a probable range for the estimate of 29.78 to 31.82 percent. The proportion of eligible women is significantly larger than the proportion of eligible men. As was true for the overall estimate, the eligibility rates for men and women decreased significantly. The declines were proportional, thus preserving the significant differential in eligibility rates for men and women noted in the 1983 study.

Eligibility of ethnic groups

The pattern of differential eligibility rates among the major ethnic groups noted for the University also emerges for the State University. The proportion of Asian graduates achieving eligibility for the State University is greater than for any other ethnic subgroup with half of all Asian graduates so eligible. The estimated eligibility rates of white and Filipino graduates are slightly above average at 31.6 percent and 29.5 percent, respectively, while eligibility rates of Black and Hispanic graduates are about one-third and one-half the overall eligibility rate for the State University. Differences in sample sizes also affect the precision of these eligibility estimates which vary from ±5.35 for Filipino graduates to ±0.94 for white graduates. Given the precision level of each estimate, the probable ranges of these estimates are 30.66 to 32.54 percent of white graduates, 12.19 to 14.41 percent of Hispanic graduates, 9.28 to 12.32 percent of Black graduates, 47.35 to 52.65 percent of Asian graduates, and 24.15 to 34.85 percent of Filipino graduates.

While the pattern of differential eligibility among ethnic groups persists, important changes in individual subgroup eligibility have occurred since 1983. Here again, the multiple changes in the admission requirements complicate the historical comparison of rates. This discussion focuses on the relative eligibility of 1983 graduates in Fall 1983 compared to that of 1986 graduates in Fall 1986. Changes in eligibility rates among ethnic groups were mixed. The eligibility estimate in 1986 for white and Hispanic graduates were significantly lower than their 1983 rate. Despite the lower overall or average rate of eligibility of graduates for the State University between the two studies, the rate among Asian graduates changed from 49.0 to 50.0 percent and the rate among Black graduates actually increased by 0.6 of a percentage point. While these changes are

DISPLAY 6 *Estimated Eligibility Rates for Freshman Admission to the California State University of 1986 Graduates of California's Public High Schools, by Sex and Major Ethnic Group*



	Overall*	Men	Women	White	Hispanic	Black	Asian	Filipino
Eligibility Pool	27.5%*	24.8%	30.8%	31.6%	13.3%	10.8%	50.0%	29.5%
Precision Level	±0.69%	±1.00%	±1.02%	±0.94%	±1.11%	±1.52%	±2.65%	±5.35%
Sample Size	15,576	7,574	8,000	9,121	3,335	1,438	1,149	322

* Includes American Indian and Pacific Island graduates, but small sample sizes for these ethnic groups preclude computation of their eligibility rates.

Source: California Postsecondary Education Commission.

not statistically significant, the changes go in the opposite direction of the overall trend in eligibility for the State University.

Eligibility of men and women within different ethnic groups

Differences between the eligibility rates for the State University of men and women within each ethnic group are consistent with overall differences between the rates for men and women as Display 7 on the next page shows. For white, Hispanic, Black and Asian graduates, the eligibility rates for women are substantially larger than those for men, but these differences are statistically significant only among white and Asian graduates. Differences in eligibili

ty rates are influenced much more heavily by students' ethnic group than by their sex.

Eligibility rates in the Master Plan context

The California Postsecondary Education Commission and its predecessor, the Coordinating Council for Higher Education, have conducted six eligibility studies over the last three decades. While segmental admission criteria and sampling procedures varied somewhat among these studies, the last three studies -- the 1976 study, the 1983 study, and the current 1986 study -- have been very similar in design and methods used for computing statewide averages. In addition, the 1986 study sought to replicate as closely as possible the methods and categories of results of the 1983 study to provide some useful comparisons over time. Display 8 on the opposite page summarizes the results of the six studies in comparison with the Master Plan guidelines while the appendix includes a discussion of the historical development of the guidelines and the nature of each of the previous studies.

As Display 8 indicates, the eligibility rate of high school graduates for the University has consistently exceeded the Master Plan guidelines. After a substantial decline in the eligibility rate from 14.8 in 1976 to 13.2 percent in 1983, the University's rate rose in 1986 to 14.1 percent. Because this rate is significantly greater than its Master Plan guideline, the University would need to adjust its admission requirements in order to comply with its Master Plan guideline.

The eligibility rates for the State University exceeded Master Plan guidelines until the 1983 study when the rate fell below the guideline. While the State University implemented adjustments to its Eligibility Index in 1985 bringing its pool up to 33.3 percent, the rate in 1986 of 27.5 percent is below its Master Plan guideline. The State University would need to make further adjustments to its admission requirements in order to comply with its guideline. Chapter Four will explore the factors affecting the eligibility rates in more detail.

Regional differences

Eligibility varies not only as a function of sex and ethnicity but also by geographic region. As in the 1983 study, the Commission examined eligibility rates among high school graduates in eight major urban regions -- San Diego County; Orange County; Los Angeles County; Riverside and San Bernardino Counties; Santa Barbara and Ventura Counties; Fresno, Kern, Tulare, and King Counties; Sacramento, Placer, and Yolo Counties; and the Bay Area, consisting of Alameda, Contra Costa, Marin, San Francisco, San Mateo, and Santa Clara Counties. A single estimate was also computed for all other rural counties outside these major urban areas. Display 9 on page 20 presents the estimated eligibility for admission to the University and State University of each region's graduates in descending order in comparison to the statewide estimates for each segment.

High school graduates in the San Francisco Bay area and Orange County were significantly more likely than average to be eligible for both the University of

DISPLAY 7 *Estimated Eligibility Rates for Freshman Admission to the California State University of 1986 Graduates of California's Public High Schools, by Sex Within Major Ethnic Group*

	White		Hispanic		Black		Asian	
	Men	Women	Men	Women	Men	Women	Men	Women
Eligibility Pool	28.5%	35.6%	11.9%	14.7%	8.2%	12.7%	46.8%	55.0%
Precision Level	±1.33%	±1.46%	±1.52%	±1.63%	±2.12%	±2.70%	±3.46%	±3.56%
Sample Size	4,495	4,623	1,542	1,793	666	771	604	545

Source: California Postsecondary Education Commission.

DISPLAY 8 1960 Master Plan Admission Guidelines and Estimated Eligibility Rates for the University of California and the California State University, 1955, 1961, 1966, 1976, 1983, and 1986

Source	Year	University of California	The California State University
1960 Master Plan Admissions Guidelines		**12.5%**	**33.3%**
Committee on the Restudy of the Needs of California for Higher Education	1955	15.0	44.0
Master Plan Technical Committee on Selection and Retention of Students	1961	14.8	43.4
Coordinating Council for Higher Education	1966	14.6	35.2
California Postsecondary Education Commission	1976	14.8	35.0
California Postsecondary Education Commission	1983	13.2	29.6
California Postsecondary Education Commission	1986	14.1	27.5

Source: California Postsecondary Education Commission.

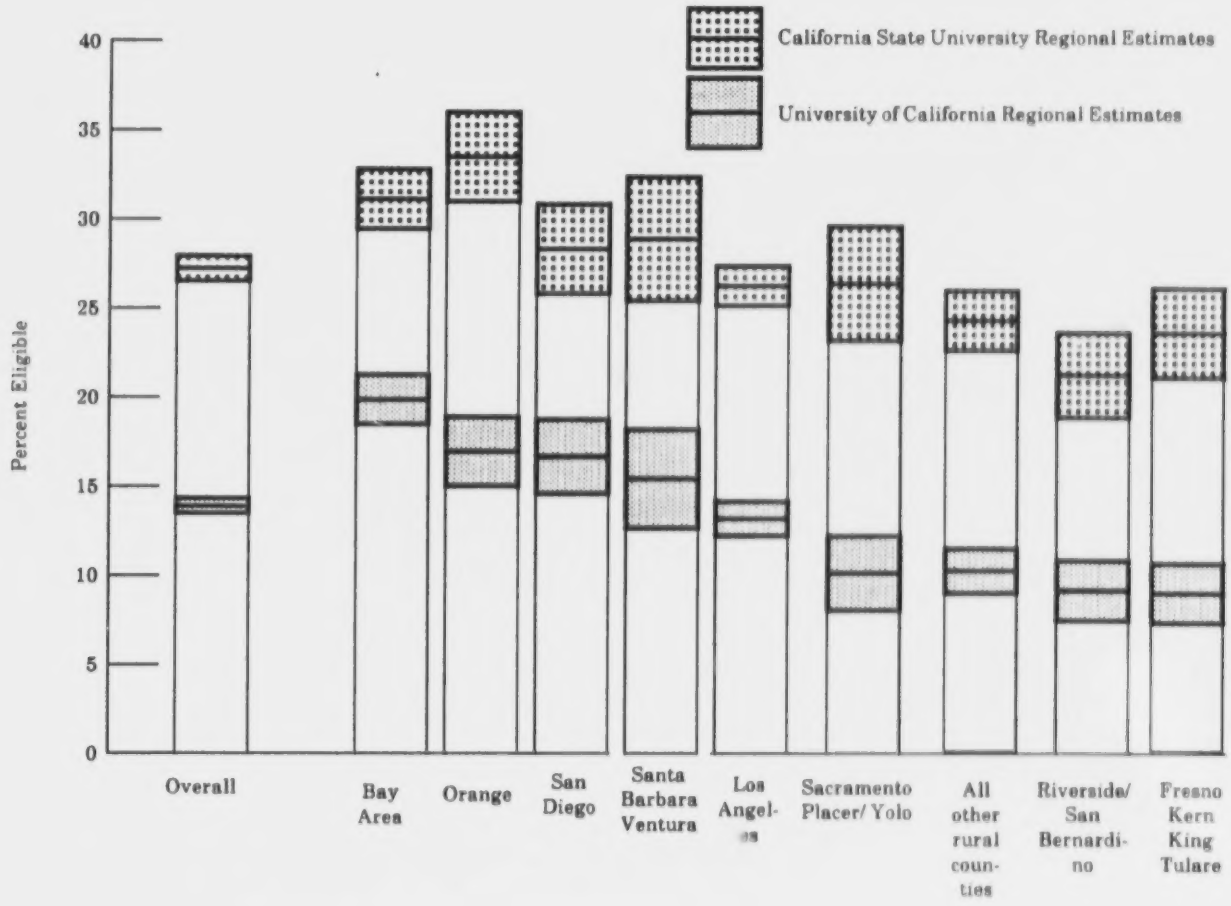
California and the California State University. On the other hand, graduates in the Fresno/Kern region, the Riverside/San Bernardino region, and in all other rural counties were significantly less likely than average to be eligible for either segment. In addition, graduates from high schools in the Sacramento region were significantly less likely than average to be eligible for admission to the University of California while no significant differences existed between their eligibility rate and the statewide average for the State University. While the estimated eligibility rate of graduates in the Santa Barbara/Ventura region and San Diego County were somewhat above average and the rates for graduates in remaining regions were somewhat below average, none of the differences were statistically significant because their probable ranges overlap the range of the overall estimate.

1986 eligible graduates and Fall 1986 enrollments

Eligibility for admission to the University and State University represents an opportunity for public baccalaureate-level education in California. Display 10 on page 21 presents the proportion of high school graduates who took advantage of this opportunity and enrolled at a California public university in comparison to the proportion of those eligible to do so. Approximately 45 percent of the 1986 graduates eligible for the University enrolled in Fall 1986, while approximately 28 percent of the State University-eligible graduates enrolled at a State University campus that fall. The difference in these rates has several sources. Because of the highly specific nature of University admission requirements, high school graduates completing a high school curriculum consistent with these requirements undoubtedly view the University of California as one of their top postsecondary education options, accounting for the high level of congruence between those eligible and those enrolled. In addition, most University eligible students are also eligible for the State University. After accounting for the proportion of these graduates who enrolled at the University, the proportion of the remaining eligible graduates who enrolled at the State University was more similar to the University enrollment rate.

The proportion of University eligible men who enrolled at the University was substantially larger than the proportion of eligible women who chose to enroll. This finding was consistent with the finding that women were less likely than men to have taken the complete set of entrance examinations required for admission. The differential enrollment patterns for eligible men and women noted for the University

DISPLAY 9 Overall Eligibility Rates for Eight Major Urban Areas and All Other Counties



Area	University of California Eligibility Pool	University of California Precision Level	University of California Range	The California State University Eligibility Pool	The California State University Precision Level	The California State University Range
Statewide	**14.1%**	**±0.54%**	**13.56-14.64%**	**27.5%**	**±0.69%**	**26.91-28.19%**
San Francisco Bay Area	20.0	±1.47	18.53-21.47	31.4	±1.69	29.71-33.09
Orange County	17.1	±2.00	15.10-19.10	33.8	±2.47	31.33-36.27
San Diego County	16.7	±2.06	14.64-18.76	28.5	±2.49	26.01-30.99
Santa Barbara/Ventura Counties	15.6	±2.86	12.74-18.46	29.4	±3.65	25.75-33.05
Los Angeles County	13.3	±0.96	12.34-14.26	26.5	±1.22	25.28-27.72
Sacramento/Placer/Yolo Counties	10.3	±2.22	8.08-12.52	26.7	±3.16	23.54-29.86
All Other Counties	10.2	±1.29	8.91-11.49	24.5	±1.78	22.72-26.28
Riverside/San Bernardino Counties	9.2	±1.71	7.49-10.91	21.4	±2.41	18.99-23.81
Fresno/Kern/King/Tulare Counties	9.1	±1.80	7.30-10.09	23.2	±2.62	20.58-25.82

Source: California Postsecondary Education Commission.

DISPLAY 10 Percentage of 1986 California Public High School Graduates Eligible for Admission Who Enrolled as Regularly Admitted Freshmen in California's Public Universities, Fall 1986

	University of California			The California State University		
	Eligible as a Percent of Graduates	Enrolled as a Percent of Graduates*	Enrolled as a Percent of Eligibles	Eligible as a Percent of Graduates	Enrolled as a Percent of Graduates*	Enrolled as a Percent of Eligibles
Overall	14.1%	6.3%	44.6%	27.5%	7.6%	27.6%
Men	13.3	6.7	50.4	24.8	6.9	27.8
Women	15.1	6.0	40.0	30.8	8.3	26.9
White	15.8	6.2	39.2	31.6	8.2	25.9
Hispanic	5.0	2.5	50.0	13.3	3.3	24.8
Black	4.5	2.4	53.3	10.8	2.5	23.1
Asian	32.8	16.2	49.4	50.0	13.9	27.8

* Based on first-time freshman enrollment of California residents who graduated from public high schools in 1985-86 and who were admitted under regular admission criteria.

Note: Source of ethnic group membership differs for eligible and enrolled students.

Source: California Postsecondary Education Commission.

were also true for those eligible for the State University although the differential was smaller.

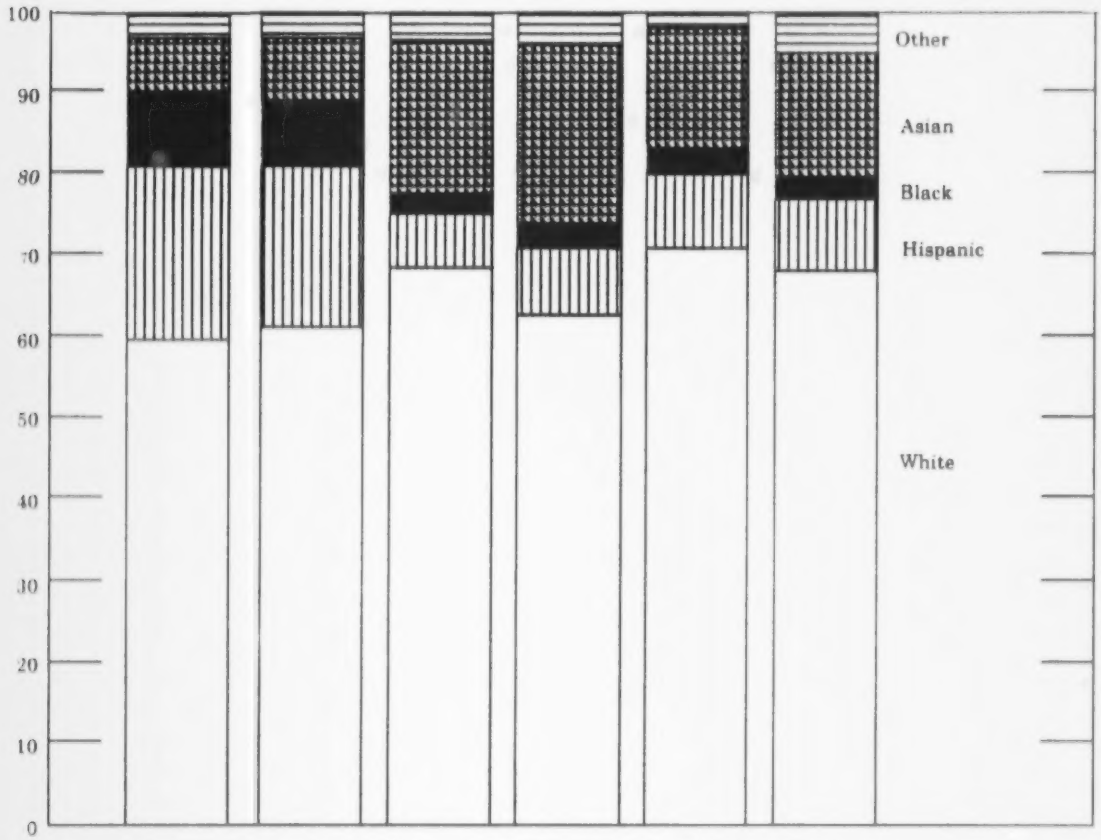
Among ethnic groups, only white graduates were less likely than average to enroll in the University when eligible to do so. Compared to the overall enrollment rate for eligible graduates of 45 percent, 53 percent of eligible Black graduates, 50 percent of eligible Hispanic graduates, and 49 percent of eligible Asian graduates enrolled in Fall 1983 while only 39 percent of eligible white graduates enrolled.

The pattern among ethnic groups is somewhat different at the State University. Only eligible Asian graduates were more likely than the average eligible graduate to enroll in Fall 1986. Compared to the overall rate of 27.6 percent of eligible graduates enrolling in Fall 1986, 26 percent of the eligible white graduates, 25 percent of the eligible Hispanic graduates, and 23 percent of the eligible Black graduates enrolled, while 28 percent of the eligible Asian graduates enrolled.

Among the 1986 graduating class compared with the 1983 class, a 4 percentage-point increase has occurred in the proportion of eligible graduates enrolling at the University and State University. Among men and women, only the enrollment rate of eligible male graduates at the University has increased by a substantially larger amount -- 9 percentage points. The enrollment rates of Black and Hispanic eligible graduates at the University also increased substantially, while the rate for eligible white graduates rose slightly and the rate for eligible Asian graduates declined since the 1983 study. At the State University, the increase in enrollment rates noted overall also occurred for all ethnic groups except among eligible Black graduates.

Display 11 on the next page provides another view of differential participation in California education of students from different ethnic backgrounds. The representation of white and Asian students among 1986 high school graduates was larger than their representation among that cohort when it was in eleventh grade. The substantially larger drop-out rates of Black and Hispanic secondary school students compared to other ethnic groups account for this changing composition. The estimated eligibility pools for the University and State University include disproportionately larger representations of white and Asian graduates than Black and Hispanic graduates. The representation of Asian graduates among regularly admitted freshmen at both the University and State University was larger than

DISPLAY 11 Ethnicity of 1984-85 Eleventh Grade Students, 1986 High School Graduates, Eligible Graduates, and Regularly Admitted Freshmen Enrolled at the University of California and the California State University, Fall 1986



	1984-85 Eleventh Graders	1985-86 High School Graduates	University of California Eligibility Pool	University of California Freshmen	California State University Eligibility Pool	California State University Freshmen
White	59.6	61.2	68.6	62.6	70.6	68.2
Hispanic	21.2	19.5	6.9	8.0	9.4	8.9
Black	9.3	8.1	2.6	3.2	3.2	2.8
Asian	7.0	8.3	19.3	22.2	14.9	15.7
Other	2.7	2.9	2.6	4.0	1.9	4.4

Note: Source of ethnic group membership differs for eligible and enrolled students.

Source: California Postsecondary Education Commission.

their representation among the estimated eligibility pools. This observation is also true for Hispanic representation among both segments' freshmen and for Black representationamong the University's freshmen in Fall 1986. The representation of white graduates among regularly admitted freshmen at both the University and State University and of Black graduates among State University freshmen is smaller than their representation in the segments' pools.

4 Characteristics of Eligible and Ineligible Graduates

AS indicated in the previous chapter, high school graduates can become eligible for freshman admission to the University and the State University by several different means, just as they may be ineligible for a variety of reasons. This chapter examines the characteristics of eligible and ineligible students in order to shed some light on the barriers students face in making the transition from secondary to university education.

Categories of University of California eligibility and ineligibility

High school graduates can be classified into five categories in terms of their eligibility for regular freshman admission to the University of California. These five categories are as follows:

I. *Eligible with All Requirements Completed:* Those who have completed all the required "a-f" course work and entrance examinations at the level of competence needed for admission.

II. *Eligible but Missing Test Results:* Those who have completed their required course work with a 3.3 grade-point average or higher, but who do not have test results; or those who have a grade-point average between 2.78 and 3.3 and test scores that qualify on the University's Index but do not have one or more of the three required CEEB test scores. (As noted earlier, these students are fully eligible for admission regardless of their test results, but they have not taken some or all the required tests.)

III. *Eligibility Indeterminate Because of Missing Test Results:* Those who have grade-point averages between 2.78 and 3.3 and would have to score high enough on admission tests to be eligible under the University's Eligibility Index, but who have no test scores. (Some of these graduates might be eligible if their scores were known while others would be ineligible, but, since they have no scores, no attempt has been made to estimate their eligibility, and thus they are not included as part of the eligible pool.)

IV. *Ineligible Because of Subject or Grade Deficiencies in "a-f" Pattern:* Those who completed all or most of an "a-f" pattern of required courses but who failed to be eligible for one of the following reasons: (1) they received a "D" or "F" grade; (2) they omitted one or more courses; (3) they were ineligible on the University's Eligibility Index; (4) they had an "a-f" grade-point average below 2.78; or (5) they completed fewer than seven of these courses in their last two years of high school.

V. *Otherwise Ineligible:* Those who had major subject omissions, scholarship deficiencies, or who graduated from schools that do not have approved "a-f" curricula.

Display 12 on the next page shows the proportions of 1986 graduates in each classification of eligibility overall, for men and women separately, and for white, Hispanic, Black, and Asian graduates. The majority of eligible graduates have completed all of the University's admission requirements at the requisite level of competence, including the full complement of required tests. A slightly larger proportion of women than men are eligible, with all requirements completed. In addition, a larger percentage of women than men finish high school with the courses and grades necessary for admission to the University but without taking the full array of college entrance examinations required by the University.

In comparison to the overall proportion of 65 percent of eligible graduates who complete all of the requirements, 76 percent of all eligible Asian graduates do so. The proportion of white eligible graduates is the same as the overall rate while 62 percent

DISPLAY 12 Percent of 1986 Public High School Graduates Categorized as Eligible or Ineligible for Admission to the University of California, by Sex and Major Ethnic Group for Fall 1986

	Category	Total	Men	Women	White	Hispanic	Black	Asian
I.	Eligible With All Requirements	9.1%	8.8%	9.5%	10.1%	3.1%	2.3%	24.9%
II.	Eligible But Missing Tests	5.0	4.5	5.6	5.7	1.9	2.2	7.9
I & II.	**Eligibility Pool**	**14.1**	**13.3**	**15.1**	**15.8**	**5.0**	**4.5**	**32.8**
III.	Eligibility Indeterminate	0.5	0.5	0.4	0.4	0.2	0.4	0.9
IV.	Ineligible by Deficiencies Within "a-f" Pattern	9.3	8.0	10.5	9.6	7.1	4.5	17.3
V.	Otherwise Ineligible	76.1	78.2	74.0	74.2	87.7	90.6	49.0

Note: Final database verification may result in changes to these estimates in the tenths of a unit.
Source: California Postsecondary Education Commission.

of the eligible Hispanic graduates and 51 percent of the eligible Black graduates complete the full array of University admission requirements. The large proportion of eligible male and Asians who complete successfully all the prerequisites for admission to the University is consistent with their relatively greater than average propensity to actually enroll at the University when eligible to do so. The finding regarding Black and Hispanic graduates seems inconsistent with their relatively greater propensity to enroll when eligible.

For a very small portion of the graduating class -- 0.5 percent, eligibility could not be determined. While these students had completed the required courses with a grade-point average between 2.78 and 3.3, they did not have the test scores needed to determine their eligibility on the University's Eligibility Index. This rate was relatively the same for men and women and for all ethnic groups except Asian graduates among whom 0.9 percent were without the necessary test scores.

Overall, 23.8 percent of all public high school graduates completed all or most of an "a-f" course pattern in high school. Forty percent of these graduates, or 9.3 percent of the graduating class, failed to achieve eligibility for the University because of one or more course omissions, a "D" or "F" in one or more courses, tests scores too low to qualify on the Eligibility Index, or insufficient courses completed in the last two years of high school. A higher proportion of women graduates than men are ineligible because of these deficiencies in their "a-f" patterns.

Among ethnic subgroups, Asian graduates were the most likely to have completed a full "a-f" pattern of course work, with 51 percent of them in this category. Sixty-four percent of these Asian graduates achieve University eligibility. White graduates are a somewhat distant second in the percentage of graduates completing all or most of their "a-f" courses at 26 percent of all white graduates. About 60 percent of these graduates achieve eligibility. While a slightly larger percentage of Hispanic graduates -- 12 percent -- complete most of the "a-f" courses than Black graduates -- 9 percent, the percentage who are eligible for the University is greater for Black graduates -- 48 percent -- than for Hispanic graduates -- 41 percent.

Comparisons with 1983 findings

The increase in the estimated eligibility rate for the University results exclusively from the increase in the proportion of graduates who are eligible and completed all of the admission requirements. In 1983, about one-half of the eligible graduates had completed all requirements with this same proportion true for men, women, and white graduates. The

percentage of Hispanic and Black eligible graduates with all requirements completed was considerably lower, 43 and 39 percent, respectively. Only eligible Asian graduates in 1983 had completed all admission requirements at a rate comparable to those in evidence in 1986.

Among those ineligible for the University, the proportion of graduates for whom eligibility could not be determined because of missing test scores was about one-half as large as the rate in 1983. Thus, graduates with the courses and grades necessary to qualify for admission to the University are more likely to also have taken the necessary college entrance examinations required than was the case in 1983.

The proportion of high school graduates completing all or most of an "a-f" curriculum in high school appears to have declined between 1983 and 1986. The "a-f " curriculum had changes between these two years with the addition of a third year of mathematics, an increase in approved electives from one or two to four, seven of the 15 required courses must be completed in the last two years of high school, and honor course grades of C or better earn an additional grade point. Overall, 28.4 percent of all 1983 high school graduates enrolled in a primarily University preparatory curriculum compared to 23.8 percent in 1986. Relatively, the same percentage point decrease occurred for men and women, and for white, Hispanic, and Black graduates. Only Asian graduates maintained their same level of participation in University preparatory courses at 50 percent.

Categories of State University eligibility and ineligibility

Two categories of eligible students exist for the State University, while the introduction of course requirements increased the number of categories of ineligibility compared to 1983 findings. For the State University, the seven categories are:

I. *Eligible by Grades Alone:* Those graduates who have earned grade-point averages greater than 3.1 and completed five of the six required courses.

II. *Eligible on Index:* Those whose grade-point averages were between 3.1 and 2.0 and whose test scores were sufficiently high to qualify on the State University's Eligibility Index and completed five of the six required courses.

III. *Eligibility Indeterminate:* Those whose grade-point averages were between 3.1 and 2.0 and completed five of the six required courses but for whom no test scores were available to determine their eligibility on the Index.

IV. *Ineligible by Lack of Courses:* Those who are otherwise eligible but have completed fewer than five of the six required courses.

V. *Ineligible by No Tests and Lack of Courses:* Those whose grade-point averages were between 3.1 and 2.0 but for whom no test scores were available and have completed fewer than five of the six required courses.

VI. *Ineligible on Index:* Those whose grade-point averages were between 3.1 and 2.0 but whose test scores were insufficient to qualify on the Index.

VII. *Ineligible by Grades Alone:* Those with grade-point averages below 2.0.

Display 13 on the next page presents the proportions of high school graduates in each eligible or ineligible category overall, for men and women separately, and for white, Hispanic, Black, and Asian graduates. More than twice as many high school graduates qualify for the State University on the basis of their grades alone than on the State University's Eligibility Index. As was the case for the University, virtually all of the differences in eligibility rates between men and women is a function of women's higher grades. In fact, a slightly smaller proportion of women than men achieve eligibility for the State University on its Eligibility Index. Consistent with the overall trend, white, Hispanic and Asian graduates are two to three times more likely to be eligible by grades than by the index. However, Black graduates are nearly as likely to qualify by the index as by grades alone.

For approximately 11 percent of the State's public high school graduates, eligibility could not be determined. While these graduates had grade-point aver-

DISPLAY 13 Percent of 1986 Public High School Graduates Categorized as Eligible or Ineligible for Admission to the California State University, by Sex and Major Ethnic Group for Fall 1986

Category		Overall	Men	Women	White	Hispanic	Black	Asian
I.	Eligible by GPA Alone	19.2%	16.2%	22.4%	21.4%	10.0%	5.7%	39.3%
II.	Eligible by Index	8.3	8.6	8.4	10.2	3.3	5.1	10.7
I & II.	**Eligibility Pool**	**27.5**	**24.8**	**30.8**	**31.6**	**13.3**	**10.8**	**50.0**
III.	Eligibility Indeterminate	11.3	11.1	11.6	12.1	11.1	9.4	6.3
IV.	Ineligible by Missing Courses	4.3	3.5	5.0	4.2	4.1	1.4	7.9
V.	Ineligible by Missing Courses and Tests	30.8	30.6	30.5	29.6	40.3	29.4	17.7
VI.	Ineligible on Index	9.8	10.0	9.7	8.4	8.9	17.4	12.3
VII.	Ineligible by GPA Below 2.0	16.3	20.0	12.4	14.1	22.3	31.6	5.8

Source: California Postsecondary Education Commission.

ages between 2.0 and 3.1 and the required courses, they did not have the college entrance examination scores necessary to determine their eligibility on the State University's Eligibility Index. This rate was relatively the same for men and women and for white and Hispanic graduates. A smaller percentage of Black graduates -- 9.4 percent -- and Asian graduates -- 6.3 percent -- had the necessary grades and courses but were missing test scores.

Approximately 4 percent of all public high school graduates whose grades and/or test scores were adequate to qualify for admission were ineligible in Fall 1986 for the State University because they had not completed at least five of the required six courses in English and mathematics. A slightly larger percentage of women than men -- 5 percent and 3.5 percent, respectively -- were ineligible on this basis. Among the ethnic groups, course requirements disqualified a much smaller than average proportion of Black graduates and a much larger proportion of Asian graduates. The proportions of white and Hispanic graduates disqualified on the basis of courses alone was the same as the overall rate.

Approximately 10 percent of all graduates are ineligible for the State University because their test scores were not high enough to qualify on the State University's Eligibility Index. The proportion of men and women determined ineligible on this basis was the same as the overall rate. A slightly lower percentage of white and Hispanic graduates were disqualified on this basis -- 8.4 and 8.9 percent, respectively -- while a somewhat larger percentage of Asian graduates -- 12.8 percent -- and a much larger percentage of Black graduates -- 17.5 percent -- were so disqualified.

The majority of ineligible graduates failed to qualify for the State University because they lacked both test scores and course requirements. Overall, approximately 31 percent of all graduates appear in this category. The proportions of men and women, and of white and Black graduates determined ineligible on this basis are the same as the overall rate. Only 17.6 percent of the Asian graduates are disqualified for admission on this basis while 40 percent of Hispanic graduates are ineligible on this basis.

One-sixth of all graduates are ineligible for the State University because their high school grade-point average is below 2.0. One-fifth of the men have grade-point averages below 2.0 while only one-eighth of the women do. Among ethnic groups,

Asian graduates are the least likely to have such low grade-point averages with only 5.6 percent of them in this category. A slightly smaller than average percentage of white graduates have grade-point averages below 2.0 while the percentage of Hispanic graduates is somewhat above average at 22.2 percent. The percentage of Black graduates with grades in this range is nearly twice the overall average at 31.6 percent.

Comparison with 1983 findings

Comparisons of the distribution of 1983 and 1986 graduates among the categories of eligibility and ineligibility is complicated by the several changes in admission requirements implemented since 1983. This discussion will attempt to compare rates in categories that are as similar as possible highlighting any differences in the definitions of the categories that are essential for interpreting the comparison.

The proportion of graduates eligible by grades alone is nearly the same in both years at a little more than 19 percent. The addition of course requirements for graduates who earn grade-point averages larger than 3.1 appears to have been offset by the reduction of the minimum grade-point average for this category from 3.2 to 3.1. This same conclusion applies to the minimal changes in the proportions of men, women, white, Black, and Asian graduates who achieve eligibility on the basis of grades alone. However, the percentage of Hispanic graduates qualifying for the State University on grades alone declined 1.7 percentage points. The addition of course requirements had a negative impact on Hispanic eligibility not equally compensated for by the changes in the minimum grades accepted without test scores.

The decline in the overall State University eligibility rate since 1983 noted in Part 3, is primarily the result of a decline in the percentage of high school graduates who achieve eligibility on the segment's Eligibility Index. Despite the administrative adjustment to the Index implemented in Spring 1985 which lowered the minimum acceptable test scores, the addition of course requirements reduced the percent eligible by 1 percentage point. Similar declines occurred for men and women, and for white and Asian graduates. However, the percentage of Hispanic graduates determined eligible on this basis declined only 0.3 of a percentage point and the percentage of Black graduates in this category actually increased by 0.5 of a percentage point. Apparently, Hispanic and Black graduates who take college entrance examinations are more likely than the average graduate to have enrolled in the required English and mathematics courses.

The proportion of high school graduates determined ineligible for the State University on the basis of its Eligibility Index has decreased approximately 1 percentage point since 1983. The decrease in this rate for men and women was similar to the overall rate while changes in this rate for ethnic groups varied widely. The percentage of Asian graduates determined ineligible on the index has decreased 6 percentage points and the rate for white graduates has declined by 2 percentage points while the proportion of Hispanic who are disqualified on the index has remained virtually unchanged. Counter to the overall trend, the percentage of Black graduates ineligible on the index increased by 2 percentage points.

The percentage of high school graduates who are ineligible for the State University because of missing test scores is the same in 1986 as it was in 1983. Overall, approximately 42 percent of all high school graduates have grade-point averages between 2.0 and 3.1 but no test scores to determine their eligibility index score. Most of these graduates -- 31 percent of all graduates -- are missing more than one of the six required courses and would have been ineligible by course omissions even if they had test scores. The rates for men, women, and white graduates are approximately the same as the overall rate. However, 51 percent of the Hispanic graduates are ineligible on this basis while 39 percent of the Black graduates and 24 percent of the Asian graduates are also ineligible on this basis.

The percentage of California public high school graduates with grade-point averages below 2.0 has declined by 1.5 percentage points since 1983. A decrease of similar proportion has occurred for men while the decrease in the percentage of women with grade-point averages below 2.0 was 0.9 of a percentage point. The proportion of white graduates with grade-point averages in this range did not change since 1983 and the decrease for Asian graduates was only 0.6 of a percentage point. While a larger than average proportion of Hispanic and Black graduates have grade-point averages below 2.0, substantial decreases in this category occurred for both groups. The percentage of Hispanic graduates declined by

3.5 percentage points and the percentage of Black graduates by 3.7 percentage points.

Determinants of eligibility

The primary determinants of eligibility are students' grade-point averages, courses completed, and the scores on standardized admission examinations. Changes in eligibility rates reflect changes in students' performance on these measures. Display 14 below compares the average grade-point averages overall and for different subgroups of California public school graduates in 1983 and 1986 as computed by the California State University. The changes in grade-point averages over this period were very small. The grade-point averages overall, for men, women, and white graduates declined slightly. The grade-point averages for Hispanic and Black graduates were slightly greater in 1986 than in 1983 while that of Asian students was unchanged.

Estimated average SAT verbal and mathematics test scores overall and for these subgroups of graduates for 1983 and 1986 are presented in Display 15

DISPLAY 14 Estimated Grade-Point Averages of California Public High School Graduates Based on Tenth, Eleventh, and Twelfth Year Grades of Studies' Samples, 1976, 1983, and 1986

Graduates	1976	1983	1986*
Overall	2.76	2.62	2.60
Men	2.64	2.53	2.51
Women	2.88	2.71	2.68
White	n.a.	2.69	2.65
Hispanic	n.a.	2.42	2.44
Black	n.a.	2.26	2.29
Asian	n.a.	2.96	2.96

Note: Grade-point average computed on the basis of all course grades in tenth, eleventh, and twelfth grades excluding physical education and military science.

* Honors course grade of C or better earns an additional grade point as of Fall 1985.

Source: California Postsecondary Education Commission.

DISPLAY 15 Estimated Scholastic Aptitude Test Scores of California Public High School Graduates Based on Studies' Samples, 1983 and 1986

	1983		1986	
Graduates	Verbal	Mathematics	Verbal	Mathematics
Overall	420	479	422	482
Men	427	507	427	508
Women	413	453	417	460
White	445	496	449	498
Hispanic	363	404	366	417
Black	339	368	355	384
Asian	369	511	379	525

Source: California Postsecondary Education Commission.

at the right. Average test scores for graduates in the eligibility samples increased slightly. Increases in both verbal and mathematics scores occurred for men and women and for white, Hispanic, Black and Asian graduates. The largest increases in estimated scores occurred for Black graduates while the changes were smallest for men.

As discussed earlier, a smaller proportion of 1986 high school graduates than of the 1983 graduates completed a full "a-f" sequence of courses in high school, as shown in Display 16 on the next page. The "a-f" course pattern changed between 1983 and 1986 through the addition of a third year of mathematics, the increase in the number of college preparatory electives required from one or two to four, seven of the 15 required courses must be completed in the last two years of high school, and honor course grades of C or better earn an additional grade point. Such a decline in participation in the required course sequence would have suggested a decline in the proportion of graduates eligible for the University. However, this did not occur, primarily because the graduates who had enrolled in the full set of "a-f" courses were more likely to successfully complete the sequence and achieve University eligibility. More analysis of the relative academic performance of these 1986 and 1983 high school graduates is needed

to more accurately determine the causes of the changes in their eligibility status.

DISPLAY 16 Estimated Proportion of California Public High School Graduates Completing All or Most of an "a-f" Course Sequence, 1983 and 1986

Graduates	1983	1986*
Overall	28.4%	23.8%
Men	26.1	21.7
Women	31.1	26.0
White	31.1	25.8
Hispanic	17.6	12.3
Black	15.6	9.4
Asian	50.3	51.0

* The composition of the "a-f" course sequence changed between 1983 and 1986.

Source: California Postsecondary Education Commission.

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5 *The Context of Eligibility*

A number of important contextual issues bear on the meaning of this study's findings for developing or changing public education policy. The environment within which educational policy decisions are made is an extremely fluid one with rapidly changing characteristics. Yet this study provides only a single view of the environment from one point in time. It provides a fairly complete picture of the academic preparation of the Class of 1986 for admission to the State's public universities but only a glimpse of these graduates' post-high school activities. Moreover, the students in this study are only part of a larger cohort of students who began their education 12 or 13 years earlier -- those who persisted through to their high school graduation. Finally, the policy changes implied by this study's results will have no impact on those graduates but rather will affect the admission requirements confronting future high school graduates who will differ from the Class of 1986 in many ways including being more ethnically diverse, having been influenced by the current educational reform efforts for a longer period of time, and facing different admission requirements at the State University.

This chapter provides an overview of these major contextual issues for consideration when planning changes in education policy.

Demographic overview of the State and its students

While the proportional growth in California's population has slowed, demographers project a population increase of over eight million people for the State between 1980 and the year 2000. The sources of this increase are different from those in previous decades. One major source is known as the "baby boom echo" -- the children of the original baby-boom generation, whose birth rate remains very low but whose sheer numbers cause a bulge in the population numbers for children in the 0 to 19 age group. In addition, foreign immigration, particularly from Mexico and the Far East, is expected to continue to add large numbers of new residents to California over those 20 years as well. Elementary schools have already experienced major increases in their student populations. These students will begin entering high school in just four years, rapidly expanding the size of the high schools and the high school graduating class such that by 1997 California is expected to witness the largest high school graduating class in its history.

The new residents, both native born and foreign born, will be more ethnically diverse than the 1980 population and this diversity is most pronounced in the younger age groups of the population. While the total population of California will grow by one-third and no ethnic group will shrink, the proportion of California's population that is white will change from approximately 66 percent in 1980 to an estimated 54 percent in 2000. While minority children composed about 25 percent of California's school-age population in 1970, their representation in this population had grown to 42 percent by 1980 and 48 percent by 1986. By 1992, students from minority subgroups are expected to be the majority of school-age students. Display 17 on the next page illustrates the rapid changes in the composition of the high school graduating class between 1983 and 1986.

Language disadvantage is an increasing phenomenon in California's schools. In the last ten years, the number of students identified as having limited English proficiency more than doubled to over a half a million students or one out of every eight. As the proportion of foreign-born young people and those living in homes where the primary language is not English increases, language and cultural diversity will continue to pose significant challenges for the schools in maintaining and expanding the numbers of students prepared for university work.

DISPLAY 17 Sex and Ethnic Composition of the Public High School Graduating Classes, 1983 and 1986

	1983		1986		Percentage
	Number	Percent	Number	Percent	Point Change
Men	126,047	49.4%	116,911	49.1%	-0.3%
Women	128,897	50.6	121,364	50.9	+0.3
White	163,470	64.1	145,958	61.2	-2.9
Hispanic	46,081	18.1	46,404	19.5	+1.4
Black	23,288	9.1	19,311	8.1	-1.0
Asian[a]	16,042	6.3	19,744	8.3	+2.0
Filipino	4,127	1.6	5,169	2.2	+0.6
American Indian	1,936	0.8	1,689	0.7	-0.1
All Graduates	254,944	100.0%	238,275	100.0%	

a. Includes Pacific Islanders.

Note: Includes all public regular and continuation high schools, adult schools, and Community College diploma programs.

Sources: 1983 High School Curriculum Survey administered by the California Postsecondary Education Commission and 1986 CBEDS data of the State Department of Education, supplemented with sex and ethnicity data supplied by the adult schools and Community Colleges directly to the Commission.

Attrition trends for the Class of 1986

Students of different subgroups persist in school at different rates. While the State Department of Education estimates that overall persistence rates statewide from tenth grade to high school graduation in 1985 was 69 percent, for Black youth the rate was 57 percent and for Hispanic youth it was 56 percent. As minority students increase their representation in the school-age population, the average persistence rate may decline. The results may be eligibility pools of high school graduates maintained at the level of the recommended guideline that provides higher education opportunities to a declining proportion of the minority population, and thus of the total population, even though the sheer numbers of students maintain higher education enrollments at or above current levels. Better understanding of the flow of students through the educational system is essential to directing educational policies that support a fair and excellent educational enterprise.

Student choices for their futures

Eligibility is the result of a series of decisions made over many years by students, their parents, and their counselors that are reflected in the students' academic records. Eligibility is opportunity that becomes a factor in the choices students make for their futures. Students who are eligible for the University of California have the opportunity to choose to enroll there as well as at a wide variety of public and private universities throughout the United States. Based on the findings of the Commission's survey of 1983 graduates (1987), 92 percent chose a postsecondary education option and only a relatively small number engaged in full-time employment directly after high school or enlist in the military.

Similarly, graduates eligible for the California State University have the opportunity to enroll at a State University as well as at a somewhat smaller yet very diverse set of public and private universities and colleges. A large number of these students choose to attend California Community Colleges located near

their homes. A larger proportion of these students than those eligible for the University work full time or part time.

Of the students not eligible for either segment, many will seek to continue their education in a California Community College. These students are also the most likely to seek out vocational or trade school opportunities. Many will also either temporarily or permanently conclude their education at this point and become employed directly out of high school. These students are also the most likely to indicate that they are unemployed -- an issue addressed later in this section.

College-going rates for the Class of 1986

According to the Commission staff's annual studies of the flow of students from California high schools to its colleges and universities, the overall college-going behavior of the Class of 1986 is not substantially different than that of the Class of 1983, with approximately 57 percent of each class enrolling in a California institution in the fall following their graduation (Reports 85-7 and 87-38). However, their distribution among the segments of higher education has changed, with a somewhat larger proportion enrolling in the State's universities and a somewhat smaller proportion enrolling in Community Colleges and independent California institutions. The relative proportions of men and women enrolling as first-time freshmen has remained nearly the same since 1983, with women continuing to comprise a slightly larger proportion of the freshman class than they do of the high school graduating class. However, the ethnic composition of the freshman class has shifted as Displays 18 and 19 illustrate.

The decrease in the proportion of white students and the increase of Hispanic students among first-time freshmen does not indicate an actual change in their relative participation in postsecondary education, but rather directly reflects shifts in their representation in the high school graduating class. However, the decrease in the representation of Black students and the increase for Asian and Filipino students are larger than the shifts in their representation in the high school graduating class. Between 1983 and 1986, Black postsecondary participation did decline while Asian and Filipino participation increased as a comparison of Display 17 with Display 18 shows.

Shifts at the University of California

This shift in ethnic composition between 1983 and 1986 was most dramatic at the University of California, where white representation moved from 66 percent to 58.9 percent of the freshman class. Coun-

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DISPLAY 18 Sex and Ethnicity of First-Time Freshmen in California Public Postsecondary Education, Fall 1983 and Fall 1986

	1983		1986		Percentage
	Number	Percent	Number	Percent	Point Change
Men	62,643	47.7%	58,498	47.8%	+0.1%
Women	68,642	52.3	63,826	52.2	-0.1
White	86,386	65.8	72,489	62.9	-2.9
Hispanic	17,723	13.5	17,148	14.9	+1.4
Black	11,553	8.8	8,924	7.7	-1.1
Asian [a]	10,634	8.1	12,131	10.5	+2.4
Filipino	3,151	2.4	3,158	2.7	+0.3
American Indian	1,707	1.3	1,458	1.3	0.0
All Freshmen	131,285	100.0%	122,533	100.0%	

a. Includes Pacific Islanders.

Source: California Postsecondary Education Commission, 1985 and 1987.

DISPLAY 19 Sex and Ethnicity of First-Time Freshmen at the University of California, the California State University, the California Community Colleges, and 61 Member Institutions of the Association of Independent California Colleges and Universities in Fall 1986 and Percentage-Point Change Since Fall 1983

Student Group	University of California 1983 Number	1983 Percent	1986 Number	1986 Percent	Change Since 1983	The California State University 1983 Number	1983 Percent	1986 Number	1986 Percent	Change Since 1983
Men	8,364	48.2%	7,876	48.0%	-0.2	9,714	44.9%	9,813	44.7%	-0.2
Women	9,004	51.8	8,525	52.0	+0.2	11,939	55.1	12,093	55.3	+0.2
White	11,468	66.0	9,054	58.9	-7.1	14,301	66.0	13,043	62.8	-3.2
Hispanic	1,355	7.8	1,484	9.6	+1.8	2,517	11.5	2,314	11.2	-0.4
Black	894	5.2	780	5.1	0.0	1,571	7.3	1,292	6.3	-1.0
Asian	2,999	17.3	3,372	21.9	+4.6	2,494	11.5	3,183	15.3	+3.8
Filipino	576	3.3	586	3.8	+0.5	599	2.8	744	3.6	+0.8
American Indian	77	0.4	106	0.7	+0.3	171	0.8	156	0.8	0.0

Student Group	California Community Colleges 1983 Number	1983 Percent	1986 Number	1986 Percent	Change Since 1983	Independent Colleges and Universities 1986 Number	1986 Percent
Men	44,565	48.3%	40,809	48.5%	+0.2	n.a.	n.a.
Women	47,699	51.7	43,208	51.5	-0.2	n.a.	n.a.
White	60,580	65.7	50,299	63.8	-1.9	12,427	76.3%
Hispanic	13,859	15.0	13,316	16.8	+1.8	1,298	8.0
Black	9,245	10.2	6,835	8.6	-1.4	785	4.8
Asian	5,180	5.6	5,571	7.0	+1.4	1,715	10.5
Filipino	1,982	2.1	1,817	2.3	+0.2	*	*
American Indian	1,428	1.5	1,148	1.5	0.0	67	0.4

Note: Ethnic totals do not equal the total of men and women because of missing ethnic data. Data for 1983 are unavailable for independent colleges and universities.

* Subsumed under Asian category.

Source: California Postsecondary Education Commission.

terbalancing this shift was a 1.8 percentage point increase in the representation of Hispanic freshmen and a 4.6 percentage point increase for Asian freshmen. While Filipino and American Indian representation increased slightly, the representation among the University's first-time freshmen of Black students did not change. In comparison to changes in the composition of the high school graduating class, these changes constitute an actual decline in the participation of white high school graduates as first-time freshmen at the University and an increase in the participation of Asian graduates. Despite the decline in their representation in the high school graduating class, Black students have maintained the same level of representation among first-time freshmen at the University -- evidence of increased participation for these graduates. Similarly, a small increase in Hispanic and American Indian students' participation at the University as first-time freshmen has occurred, while the change in the representation of Filipino graduates among first-time freshmen is nearly the same as the change in their representation in the high school graduating class -- indicating no significant change in their participation rate.

Shifts at the California State University

At the State University, the representation of white students in the freshman class declined to 62.8 percent from 66.1 percent. Representation of Black students also decreased by 1.0 percentage point to 6.3 percent. Offsetting these changes were increases of 3.8 percentage points in the representation of Asian freshmen to a total of 15.3 percent and 0.8 percentage point increase for Filipino freshmen to a total of 3.6 percent. Hispanic representation at 11.2 percent and American Indian representation at 0.8 percent were relatively unchanged. These changes in representation suggest shifts in participation rates for white and Asian high school graduates as first-time freshmen at the State University similar to those that occurred at the University. While the participation rate of Black and American Indian high school graduates for the State University remained relatively unchanged, the participation rate of Filipino graduates increased and of Hispanic graduates declined.

Shifts at the California Community Colleges

The diversity of the California Community Colleges has changed the least among the public segments in the last three years. White representation in their freshman class decreased 2.1 percentage points to 63.8 percent. Similarly, Black representation fell to 8.6 percent from 10.2 percent, for a 1.4 percentage point decline. Among Community College freshmen, Hispanic representation has increased 1.8 percentage points to 16.8 percent and Asians now compose 7.0 percent -- an increase of 1.4 percentage points. The participation of white high school graduates as first-time freshmen at the Community Colleges has actually increased between 1983 and 1986 as has the participation of Hispanic students. During this same period, the participation of Black, Asian, and Filipino graduates has declined, while American Indian participation has remained stable.

Viewing continuation of one's education after high school as educational persistence, the patterns of persistence and attrition at the secondary level are exacerbated in public higher education. Representation of Black and Hispanic youth in higher education is below their representation in their graduating class, and the pattern of declining representation extends to college enrollment and college degree attainment, where Black and Hispanic freshmen are one-third to one-half as likely as white and Asian freshmen to earn their degrees within five years of matriculation.

Representation at independent colleges and universities

In 1986, white students comprised 76.3 percent of first-time freshmen in 61 independent colleges and universities in California. Asian students made up 10.5 percent of the freshman class, while Hispanic, Black, and American Indian representation was 8.0 percent, 4.8 percent, and 0.4 percent, respectively. Unfortunately, the ethnic composition of the freshman classes in these 61 institutions for 1983 was not available so no comparisons of changes in representation and participation rates are possible.

Economic impact of postsecondary education

In its final report, the Commission for the Review of the Master Plan for Higher Education stated:

> A vital, comprehensive, accessible, and excellent educational system is essential to the cultural, political, and economic health of a nation or state. Educational institutions provide the basic and specialized training necessary for an advanced workforce. They help to establish the common values underlying a stable, responsive political system. They nurture the creative talents essential to cultural richness and to scientific advance (1987, p. 1).

Admission policies in postsecondary education -- the focus of this eligibility study -- are key to the distribution of opportunities and benefits both societally and individually that may be gained through higher education. Earning a college degree greatly enhances individual earning power. A recent U.S. Census Bureau report found that the average monthly income among college graduates nationally was $1,910 while high school graduates have an average monthly income of $1,045 and nongraduates earn an average of $693. State and national incomes depend heavily on the personal income levels of their citizens. Financial support for societal needs in the areas of health and safety as well as education depend on personal income taxes. These facts il-

lustrate only a portion of the implications of differential eligibility and college-going behavior for the vitality of our state and the nation.

Future eligibility studies

The current freshman admission situation in the State's public universities is extremely dynamic. The California State University has announced additional course requirements effective Fall 1988 and has proposed a comprehensive set of 15 course requirements to be effective Fall 1992. The University of California's Board of Admissions and Relations with Schools is discussing a research agenda directed at the nature and impact of its freshman admission requirements. Up-to-date information about high school graduates' eligibility under new and proposed requirements will be needed as the State's educational policy makers plan for public educational opportunities in the future.

Appendix *Background on the 1986 Study*

THIS appendix provides historical information on eligibility studies, technical information on the scope and methodology of the 1986 study, and acknowledgement of the efforts of the entire California education community that contributed to the successful completion of this study.

History of the eligibility studies

In 1955, a study conducted by the Committee for the Restudy of the Needs of California in Higher Education found that approximately 44 percent of high school graduates were eligible for admission to the then California State Colleges, while about 15 percent were eligible for admission to the University of California (McConnell, Holy, and Semans, 1955, pp. 105, 111). Following the publication of this study, both segments made slight adjustments in their freshman admission requirements.

In developing the 1960 Master Plan, the Master Plan Survey Team reviewed enrollments in the State's higher education institutions from 1948 to 1958 and calculated a "status quo" pattern of attendance that it applied to the Department of Finance's projections of California high school graduates through 1975. The team found that using this "status quo" pattern, the number of full-time students enrolled in California public colleges and universities would nearly triple from 225,615 in 1958 to a projected 661,350 in 1975. (Actual Fall 1975 full-time enrollments were 736,208.) Its projections showed that the State Colleges and the University would be forced to absorb a disproportionate share of lower-division enrollment growth, compared to the then "junior colleges." In addition, this enrollment growth would be disproportionately distributed among University and State University campuses, with some facing demand far in excess of capacity and others having unused facilities.

In the opinion of the Survey Team, the expansion of these two segments was not in the best interest of the State, both because of the cost for expanding facilities and because growth in their lower-division enrollments might interfere with their ability to meet their upper-division and graduate instructional responsibilities. During 1959-60, the Survey Team's Technical Committee on Selection and Retention of Students reviewed the correlation between students' level of preparation and their subsequent academic success in the State Colleges and the University. On the basis of its findings, it recommended to the Survey Team that the percent eligible should be reduced to the top one-third of all public high school graduates for the State Colleges and the top one-eighth for the University. The Survey Team adopted this recommendation and encouraged the University and the State Colleges to raise their admission standards so that they selected first-time freshmen from these pools of high school graduates, while leaving the specific admission criteria to the discretion of the governing boards of each segment.

Subsequent evaluations of eligibility proportions

Since the adoption of the Master Plan, five additional studies have analyzed the proportions of high school graduates eligible for admission in light of these guidelines. Display 8 on page 19 presents the statewide results of these studies and they can be summarized as follows:

The 1961 Study: In its 1961 High School Transcript Study, the Master Plan's Technical Committee analyzed 15,600 transcripts, representing approximately 10 percent of California's 1960-61 day and adult evening public high school graduates. Its analysis indicated that 43.4 percent of the graduates were eligible for admission to the State University, as were 14.8 percent for the University. In response, the State University changed the relative weight of the grade-point average and college entrance test scores in its Eligibility Index as of Fall 1965, and the University dropped three alternate means of determining eligibility that accounted for the eligibility of 2.2 percent of the high school graduates.

The 1966 Study: In 1966, the Coordinating Council for Higher Education evaluated 21,739 high school transcripts -- representing 9.75 percent of all 1964-65 California public high school graduates, generating eligibility estimates of 35.2 percent for the State University and 14.6 percent for the University. Subsequently, the State University made minor adjustments to its Eligibility Index, while the University tightened its admission requirements by requiring all freshman applicants regardless of scholarship qualifications to submit scores from the Scholastic Aptitude Test and three Achievement Tests and reducing by half the number of required courses that applicants could repeat.

The 1976 Study: The California Postsecondary Education Commission's 1976 study included 9,965 transcripts, representing approximately 3.4 percent of the 1974-75 graduating classes from all public high schools and Community College high school diploma programs, as well as General Education Diploma (GED) awards. It found that 35.0 percent of these graduates were eligible for State University admission, compared to 14.8 percent for University admission. Neither segment adjusted their admission requirements in response to these findings, but the University changed its requirements later by adding a fourth year of English, raising the minimum grade-point average regardless of test scores from 3.1 to 3.3, and lowering the minimum with test scores from 3.1 to 2.78.

The 1983 Study: For its 1983 study, the California Postsecondary Education Commission analyzed 14,423 transcripts, representing approximately 5 percent of the 1982-83 graduating classes from all public regular and continuation high schools, adult schools, Community College diploma programs, and private high schools. The eligibility rates for public high school graduates comparable to those computed in earlier studies were 13.2 for the University and 29.6 percent for the State University. (The percent for the State University differs from the 29.2 percent published in the 1983 Eligibility report because of eligibility coding errors on some transcripts that were subsequently corrected.) The 1983 study also provided for the first time differential eligibility estimates for men and women and for four ethnic groups -- white, Hispanic, Black, and Asian graduates. Display 20 below summarizes these data. The 1983 study also sought to estimate eligibility rates of private high school graduates, but because of insufficient response from private high schools, the report presented eligibility estimates for graduates of responding private high schools without the implication that these were reliable rates for all private high school graduates. In response to this study's results, the California State University lowered the minimum grade-point average accepted regardless of test results to 3.11 and adjusted its Eligibility Index score for those with grade-point averages between 2.0 and 3.1. Other changes in admission requirements at both the State University and the

DISPLAY 20 *Estimated Eligibility Rates for Freshman Admission to the University of California and the California State University of 1983 Graduates of California's Public High Schools, by Sex and Major Ethnic Group*

	University of California		The California State University	
Group	Estimate	Precision	Estimate	Precision
Men	12.6%	±0.79%	26.3%	±1.05%
Women	14.2	±0.82	32.7	±1.09
White	15.5	±0.73	33.5	±0.95
Hispanic	4.9	±0.91	15.3	±1.41
Black	3.6	±1.23	10.1	±1.89
Asian	26.0	±2.89	49.0	±3.08

Source: California Postsecondary Education Commission.

University occurred independently of this study's results. As noted earlier in this report, the State University added course requirements in Fall 1984 for the first time since 1966 -- four years of English and two years of mathematics. It has also announced the expansion of these course requirements to a full complement of 15 courses effective for Fall 1988. The University has also added to its course requirements a third year of college preparatory mathematics, expanded approved electives from one or two to four, required that at least seven of the 15 "a-f" courses be completed during the last two years of high school, and added a bonus grade point for honors courses in which a "C" or better is earned.

Display 21 below shows the freshman admission requirements for the State University in Fall 1983, Fall 1986, and Fall 1988. Display 22 on page 42 presents University freshman admission requirements for Fall 1983 and 1986. The University has announced no future changes in its requirements.

Scope and methodology of the 1986 study

The primary task of the Commission in its 1986 High School Eligibility Study has been to replicate the findings of the prior studies described above regarding the percentage of the graduating class of California's public high schools eligible for admission to the University of California and the California State University as first-time freshmen. In particular, the 1986 study sought to replicate the design

DISPLAY 21 California State University Freshman Admission Requirements, Fall 1983, 1986, and 1988

	Fall 1983	Fall 1986[a]	Fall 1988[b]
High School Diploma	Yes	Same	Same
Subject Area Credits			
English	None	4	4
Mathematics	None	2	3
History & Government	None	None	1
Laboratory Science	None	None	1
Foreign Language	None	None	2
Visual/Performing Arts	None	None	1
Approved Electives	None	None	3
GPA Requirement	2.0 or higher	Same	Same
Examination Requirement	If higher than 3.2, no tests needed	If higher than 3.1, no tests needed	Same
	If 2.0 to 3.2: qualifying Eligibility Index Score	If 2.0 to 3.1; qualifying Eligibility Index Score	Same
Entrance by Exam Alone	No provision	No provision	No provision

a. Regular admission on condition with five of the six units required in English and mathematics.

b. A minimum of 10 courses which must include four years of English and two years of mathematics are required for regular admission.

Note: Honors course grade of C or better earns an additional grade point as of Fall 1985.

Sources: 1983: California State University, 1983, pp. 5-6.
1986: California State University, 1985.
1988: California State University, 1986, p. 1.

DISPLAY 22 University of California Freshman Admission Requirements, Fall 1983 and 1986

	Fall 1983	Fall 1986[a]
High School Diploma	Yes	Same
Subject Area Requirements (one-year courses)		
a. History	1	1
b. English	4	4
c. Mathematics	2	3
d. Laboratory Science	1	1
e. Foreign Language	2	2
f. College Preparatory Electives	1-2	4[b]
Scholarship Requirement	2.78	Same
Examination Requirement	SAT/ACT and Achievement	Same
Scholarship/Examination	GPA of 2.78-3.29 and qualifying SAT/GPA Index Score	Same
Entrance by Examination	SAT total of 1100 and Achievement Total of 1650, with 500 minimum individual score	Same

a. At least seven of the 15 courses must be completed during the last two years of high school.

b. Courses must be selected from history, English, advanced mathematics, laboratory science, foreigh language, social science, visual and performing arts.

Note: Honors course grade of C or better earns an additional grade point as of Fall 1984.

Sources: 1983: University of California, 1983, pp. 15, 17.
1986: University of California, 1985, pp. 12-15.

and results of the 1983 study that provided not only reliable statewide estimates of eligibility rates but also differential estimates for men and women, and for white, Hispanic, Black, and Asian graduates.

Analysis of student eligibility

To compute eligibility estimates required gathering the following information: (1) the number of 1986 high school graduates by sex and ethnicity for each high school, adult school, and Community College diploma program, (2) the sex and ethnicity of each graduate selected as part of the random sample from each high school, and (3) the eligibility status for the University and the State University of each graduate in the sample, as determined by their grade-point average, their course-taking pattern, and their test scores. The following paragraphs review the process of creating these data bases and identify the computational adjustments needed to ensure the accuracy and reliability of the resulting eligibility estimates.

High School Graduating Class Size and Composition: Information on graduating class size from the State Department of Education's Basic Educational Data System provided the information on the size and composition of the graduating classes in public regular and continuation high schools needed to develop sampling rates and subsequently to compute esti-

mates. Sampling rates for adult schools and Community College diploma programs were set at one out of every 18. Adult schools and Community College diploma programs that participated in the 1986 study provided information on the composition of their graduating classes directly to the Commission. Commission staff estimated this information for nonparticipating schools of this type.

Sampling methodology: As part of the effort to replicate as closely as possible the 1983 eligibility study, the sampling methodology was the same as implemented in that study with only one major exception -- private high schools were not included in the sampling effort. This sampling methodology can be summarized as follows:

- The primary sampling unit was the high school. Every high school in the State was requested to supply one or more transcripts of their 1985-86 graduates. A copy of a typical letter instructing the high schools on how to select their samples appears on pages 44 and 45.
- The sampling procedure was designed to yield an overall sample of sufficient size to generate an eligibility estimate for each segment that was accurate within ±1 percentage point with a 95 percent confidence level.
- Because of smaller sample size for the ethnic subgroups, estimated eligibility rates would be somewhat less precise than the overall estimates. For the estimated eligibility rates of the major subgroups of white, Hispanic, Black, and Asian graduates to be considered comparable to the 1983 findings for these subgroups, they would be within ±3 percentage points with a 95 percent confidence level.
- The transcript sampling method used for each high school was systematic and began with a random start. That is, the first transcript to be selected from a high school's list of graduates was based on a number drawn from a table of random numbers. Each transcript selected thereafter for inclusion in the sample was selected using a fixed increment until the end of the list of graduates was reached.
- In order to minimize degradation in confidence or tolerance levels for each subgroup, such as Black graduates, the sampling technique was altered somewhat at some high schools to increase the number of graduates selected. The effect of this "oversampling" on overall eligibility rates was compensated for by applying a weighting factor to each transcript, thus adjusting the overall sample to reflect each transcript's true proportion of the population.

This methodology provided an approximate 6.7 percent random sample of transcripts for the Class of 1986. Commission staff monitored the appropriate application of the transcript selection procedures by the high schools. The sampling instructions directed school personnel to use a complete and correct list of their 1985-86 graduates in identifying sample transcripts and to include this list when submitting their transcripts to the Commission. Commission staff then reviewed each school's sample of transcripts in light of the sampling instructions and the graduation list. For schools that did not submit a graduation list, transcripts were put in alphabetical order and then reviewed for reasonable representation of grade-point average and/or class rank. Any sample that did not conform to the expected distribution was returned to the school and a new sample requested.

In addition to the student's transcripts, schools completed and returned a "Supplemental Student Information" form with each transcript. These forms established the sex and ethnicity coding for the computation of subgroup estimates. Display 23 on page 46 shows the sex and ethnicity of the sample of 1983 graduates in comparison to the sex and ethnic composition of the high school graduating class based on this sample and the actual composition of the class based on CBEDS and Commission school data.

While the sample of student records included a disproportionate number of transcripts for male graduates, the weighting procedure yielded estimated numbers of men and women graduates whose proportional representation equaled exactly their actual representation in the graduating class. In spite of the intentional oversampling of Black and Hispanic student records, the weighting procedure generated estimated numbers of graduates among whom white graduates were somewhat overrepresented. The results derive from the composition of the participating schools in which the proportion of white graduates was above average. Schools with largely minority graduates were somewhat less likely to have participated in this study than those with predominantly white graduates.

November 5, 1986

CLAYTON VALLEY HIGH
1101 ALBERTA WAY
CONCORD, CA 94521

Dear High School Principal:

Several weeks ago, you received a letter describing the 1986 High School Eligibility Study. As noted in that letter, the Governor and Legislature have directed the California Postsecondary Education Commission to study Eligibility of 1986 high school graduates for admission to the University of California and The California State University.

The study requires that the Commission collect on a random basis a limited number of transcripts of students' records of the high school graduating class. The Commission will reimburse you for the cost of processing the transcripts at the rate of $4.00 per transcript. To assure timely payment, be sure to complete and return the Contact and Invoice Form included with this letter.

This letter explains how to select the transcripts needed from your school. The sample of transcripts must be selected at random from the ENTIRE set of students records of ALL students receiving a high school diploma from your school during the 1985-86 year, INCLUDING THOSE WHO LEFT ON THE BASIS OF PASSING THE CALIFORNIA HIGH SCHOOL PROFICIENCY EXAMINATION (CHSPE). To ensure that the entire 1986 graduating class is included and the transcripts are selected randomly, please use the following procedures:

1. Using a list of your 1985-86 Winter and Spring graduates, ADD the names of those who may have qualified for a diploma by passing the California High School Proficiency Examination but who were not included in your current official listing of graduates and DELETE the names of any students who did not actually graduate this year or were AFS students. (If it is impossible for you to compile a list of all graduates, call Daisy Baird of the Commission staff collect at (916) 324-3884 for alternative procedures.)

2. Using this list, mark the 6TH name on the list. Then mark every 18TH name thereafter until you reach the end of the list of graduates. To aid you in identifying graduate names, here are the numbers of the graduates whose names you should mark. Mark the names corresponding to the following numbers on the graduation list: 6, 24, 42, 60, 78, 96, 114, 132, 150, 168, 186, 204, 222, 240, 258, 276, 294, 312, 330, 348, 366, 384, 402, 420, 438.

   These numbers are based upon an estimated graduating class of 455. This estimate is based on the number of 1985 graduates from your school. If your school's graduating class exceeds 455 students use the following numbers to mark additional students names. Mark the names numbered: 456, 474, 492, 510, 528.

3. For each graduate whose name you marked on the list, pull from your student record file that student's complete academic record.

4. Make one complete copy of each selected graduate's record. This should be the complete academic record of the student, but need NOT be an official (signed and sealed) transcript.

5. Attach to each transcript an enclosed "Student Supplemental Information" (SSI) form and enter ALL of the requested information. It is EXTREMELY important that SAT, ACT, and CEEB test scores be included for all graduates who took these tests if they are not already entered on the student's record.

6. Mail THE TRANSCRIPTS WITH THEIR SSI FORMS AND THE COMPLETE LIST OF GRADUATES used to select the sample to:

   Transcript Study
   CPEC
   1020 12th Street-3rd Floor
   Sacramento, CA 95814

If you have any questions regarding this request, please contact Daisy Baird at (916) 324-3884 or Jeanne Ludwig at (916) 324-4991.

We recognize that this is an extremely busy period for you, but the legislatively mandated reporting deadline requires extraordinary effort by all parties. Your assistance with this very important statewide project is greatly appreciated.

Sincerely,

William Pickens

William H. Pickens
Executive Director

DISPLAY 23 *Sex and Ethnic Composition of 1986 Graduates of All Public High Schools, Participating Public High Schools, Estimated Graduates Based on Sample, and the Unweighted Sample of Graduates in the Study*

	All High Schools		Participating High Schools		Estimated Graduates		Unweighted Sample	
	Number	(Percent)	Number	(Percent)	Number	(Percent)	Number	(Percent)
Men	116,911	49.1	110,464	49.1	109,416	49.1	7,566	48.6
Women	121,364	50.9	114,426	50.8	113,475	50.9	7,989	51.4
White	145,958	61.2	139,245	61.9	138,466	65.0	9,122	59.1
Hispanic	46,404	19.5	42,416	18.9	39,722	18.6	3,331	21.6
Black	19,311	8.1	17,931	8.0	15,662	7.3	1,424	9.3
Asian	19,744	8.3	18,813	8.4	15,672	7.4	1,147	7.4
Filipino	5,169	2.2	4,905	2.2	3,211	1.5	322	2.1
American Indian	1,689	0.7	1,606	0.7	374	0.2	77	0.5
TOTAL	238,275		224,890		224,746		15,557	

Source: California Postsecondary Education Commission.

Determination of student eligibility: Commission staff supplied copies of the 15,577 usable transcripts to the University and State University for their eligibility analysis. In keeping with the privacy of student records provisions of the State *Education Code*, the staff removed any personally identifying information, including the sex and ethnicity of these graduates, from the transcript copies. Each segment then assigned regular admission evaluators the responsibility of assessing the eligibility of each student in the sample for their segment.

The basic components for determining a high school graduate's eligibility for admission to either segment as a first-time freshman are their high school grades, courses completed, and scores on college entrance examinations -- either the Scholastic Aptitude Test (SAT) or the American College Test (ACT), and, at the University, the College Entrance Examination Board (CEEB) Achievement Tests. To facilitate analysis of the effects of these admission criteria on eligibility, possible eligibility and ineligibility determinations were separated into several categories as listed in Display 24 on page 47.

The Commission's request to the high schools for the sample of transcripts explicitly stated the importance of including college entrance examination results. In an effort to insure inclusion of as many truly eligible graduates as possible, the Commission staff initiated a search for missing test scores by the Educational Testing Service. After completing the search, the staff of the segments recomputed eligibility statuses for any students for whom test results were recovered. Students for whom no test results were discovered and for whom such tests were necessary for determination of eligibility -- such as those with a University eligibility status of "F" or a State University status of "3" -- were designated as undetermined eligibility and were *not* included in the eligibility pool. Those with University eligibility statuses of "D" and "E," however, remained part of the eligible subgroup and their contributions to the overall eligibility pool were computed and included in the eligibility estimate.

Calculation of eligibility estimates and their precision: Theoretically, eligibility rates are simply the number of high school graduates eligible to enroll in any one year as first-time freshmen at the University and State University if they chose to apply, ex-

DISPLAY 24 *Bases for Eligibility Determinations by the University of California and the California State University, Fall 1986*

Status	University of California	The California State University
ELIGIBLE	A. Tests scores on SAT or ACT and three CEEB Achievement tests exceed minimums.	1. GPA greater than 3.1 and required courses.
	B. GPA of 3.3 or greater in "a-f" courses with all tests sufficient to qualify.	2. GPA between 3.1 and 2.0 with test scores on CSU Eligibility Index and required courses.
	C. GPA between 3.3 and 2.78 in "a-f" courses with test scores to qualify on UC Eligibility Index.	
	D. GPA of 3.3 or greater in "a-f" courses but missing all or part of required tests.	
	E. GPA between 3.3 and 2.78 in "a-f" courses and meets UC Eligibility Index but missing all or part of the Achievement tests scores.	
INDETERMINATE	F. GPA between 3.3 and 2.78 in "a-f" courses but missing SAT or ACT test scores.	3. GPA between 3.1 and 2.0 with required courses but missing test scores.
INELIGIBLE	G. Subject omission: Missing (1or 2) "a-f" courses.	4. Missing course requirements but otherwise eligible.
	H. GPA between 3.3 and 2.78 in "a-f" courses but test scores insufficient to qualify on UC Eligibility Index.	5. GPA between 3.1 and 2.0 but test scores and course requirements missing.
	I. GPA below 2.78 in "a-f" courses	6. GPA between 3.1 and 2.0 but test scores insufficient to qualify on CSU EligibilityIndex.
	J. D or F grade in "a-f" (1 or 2) courses.	7. GPA below 2.0.
	K. Subject and GPA deficiencies.	
	L. Less than 7 courses completed during last two years.	
	M. Other ineligible.	
	N. No approved courses list on file.	

Source: California Postsecondary Education Commission.

pressed as a percent of the total graduating class. In a study such as this, evaluating the eligibility of every high school graduate in California is impractical, and thus an estimate was computed on the basis of the sample of graduates described earlier. Such a procedure required the application of standard statistical sampling procedures. Further, the use of differential sampling rates by the high schools and the choice of the high school as the basic sampling unit necessitated the application of other standard statistical adjustments to ensure that the estimates derived were reliable enough for use in policy evaluation and modification. The expected precision of the overall 1986 eligibility estimates is the same as that established for the 1976 and 1983 studies -- that is ±1 percentage point. Because the uses of eligibility estimates for subgroups is less rigid, precision levels of ±3 percentage points are sufficiently reliable.

Acknowledgements

The 1986 High School Eligibility Study required the cooperation of California's entire educational community. The sheer volume of data collected and its implications for work overload in every segment warrants recognition.

Intersegmental Task Force on Eligibility

During the 1983 and 1986 eligibility studies, an intersegmental task force has overseen the development and implementation of the studies. Representatives from the State Department of Education, the Office of the Chancellor of the State University, the Office of the President of the Univer-sity, the Association of Independent California Colleges and Universities, the Community College Chancellor's Office, and faculty representatives from the Academic Senates of the University and State University maintain an open forum for the discussion of the policies and procedures governing the studies, and offer recommendations that guide both the investigation and the analysis in the reports.

Secondary school contributions

Graduates' high school transcripts and high school graduation class sizes were essential components of the eligibility analysis. The State Department of Education provided accurate identification of all high schools to be included and data on graduation class sizes by high school for developing sampling rates and computing estimates. Furthermore, the Superintendent of Public Instruction endorsed the importance of the data gathering effort by signing the cover letter announcing the study.

The vast majority of high school principals and their counseling and record-keeping staffs contributed time and effort to the accurate selection of the sample of graduates' transcripts. In spite of the overload the data request entailed, the attitude of these individuals was invariably cooperative and helpful.

Public universities' contribution

The other essential component of the calculation of eligibility estimates was the determination of the eligibility status of each member of the sample by admission counselors at the University of California and the California State University. Segmental staff within each systemwide office assumed responsibility for the correction of discrepancies appearing in the evaluation results. In addition, they independently developed estimates of eligibility rates for their segment to verify the Commission's computations.

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